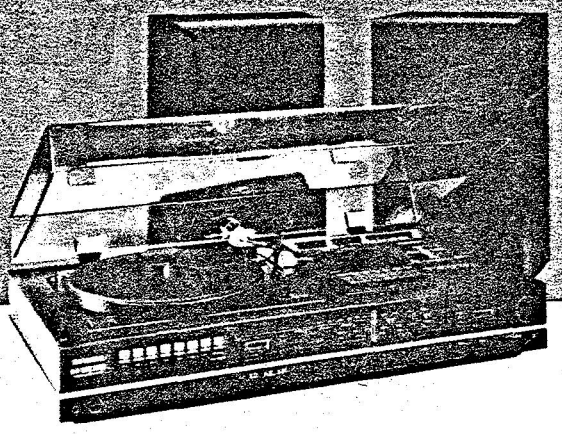
SERVICE MANUAL

# FISHER

# MCE-4025

## STEREO MUSIC CENTER



*The first name in high fidelity*

# SPECIFICATIONS

(AM TUNER SECTION)

| | |
|---|---|
| Frequency range | LW 150 ~ 350kHz<br>MW 520 ~ 1605kHz<br>SW 6 ~ 18MHz |
| Usable sensitivity (IHF) | LW, MW 1000 μV/m |
| Selectivity (IHF) | Better than 30 dB |
| Signal to noise ratio | Better than 40 dB |

(FM TUNER SECTION)

| | |
|---|---|
| Frequency range | 87.5 ~ 108MHz |
| 30dB S/N sensitivity | 3 μV |
| Limiting sensitivity | 2 μV |
| Selectivity (IHF) | Better than 40 dB |
| Signal to noise ratio | Better than 47 dB (98MHz) |
| Harmonic distortion | Mono Less than 2% (100% mod.)<br>Stereo Less than 2% (100% mod.) |
| Stereo separation | Better than 30 dB at 1000Hz |
| Antenna impedance | 300 ohm Balanced type |

(AUDIO AMPLIFIER SECTION)

| | |
|---|---|
| Continuous power output (RMS) | |
| 1KHz, both channels driven at Impedance 4 ohm | 30W + 30W |
| Harmonic distortion | Less than 1% at rated power output |
| Frequency response at AUX input | 20 ~ 20kHz ± 1.5dB |
| Bass control | ± 10 dB 100Hz |
| Treble control | ± 10 dB 10kHz |
| at volume cntrol position set to − 30dB | + 8dB 100Hz<br>+ 4dB 10kHz |
| Signal to noise ratio | PHONO Better than 35 dB<br>AUX Better than 50 dB |
| PHONO equalization curve | RIAA standard |

(TURNTABLE SECTION)

| | |
|---|---|
| Turntable speeds | 33-1/3 & 45 r.p.m. |
| Wow and flutter | ± 0.1% RMS. |
| Max. usable cartridge weight | 11gr. |
| Frequency response | 30 ~ 16000Hz |
| Channel separation | 25 dB |
| Stylus | R-S07163 (Diamond) |

(CASSETTE TAPE SECTION)

| | |
|---|---|
| Tape speed | 1-7/8 IPS. ± 1% |
| Fast forward time | 100sec. (C-60 cassette) |
| Rewind time | 100sec. (C-60 cassette) |
| Wow & flutter | 0.2% RMS. |
| Crosstalk | Better than 60dB (track to track) |
| Stereo separation | 40dB (at 1000Hz) |
| Signal to noise ratio | Better than 55dB Dorby NR on |
| Frequency response | 30 ~ 14000Hz |

(GENERAL)

| | |
|---|---|
| Power source | 110, 120, 220V, 50/60Hz |
| Power consumption | 175W at rated output |

NOTE : Specifications are subject to change without notice.

# ALIGNMENT PROCEDURES

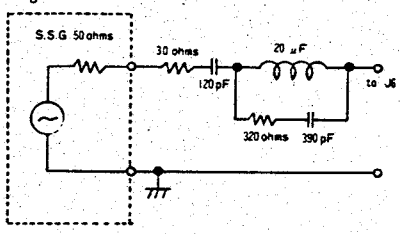
AM IF and RF Alignment

| STEP | MODE | SIGNAL INPUT | FREQUENCY OF SSG | DIAL SETTING OF RADIO | COMPONENTS TO BE ADJUSTED FOR MAX. |
|---|---|---|---|---|---|
| 1 | MW | Thru loop antenna | 455KHz | Lower end | CF-3, T-8 |
| 2 | LW | | 145KHz | Lower end | OSC coil T-6 |
| 3 | LW | | 355KHz | Upper end | OSC trimmer CT-8 |
| 4 | LW | | 150KHz | 150KHz | Ant. coil L-901 |
| 5 | LW | | 350KHz | 350KHz | Ant. trimmer CT-6 |
| 6 | MW | | 505KHz | Lower end | OSC coil T-5 |
| 7 | MW | | 1650KHz | Upper end | OSC trimmer CT-7 |
| 8 | MW | | 600KHz | 600KHz | Ant. coil L-901 |
| 9 | MW | | 1400KHz | 1400KHz | Ant. trimmer CT-5 |
| 10 | SW | Thru Dummy antenna (Fig. 1) | 5.8MHz | Lower end | OSC coil T-7 |
| 11 | SW | | 18.5MHz | Upper end | OSC trimmer CT-9 |
| 12 | SW | | 6.0MHz | 6.0MHz | Ant. coil T-4 |
| 13 | SW | | 18.0MHz | 18.0MHz | Ant. trimmer CT-4 |

Repeat STEP 4 and 5
Repeat STEP 8 and 9
Repeat STEP 10 and 11

SW Dummy Ant.

Fig. 1




AM Signal Meter Alignment

| Input Signal | Component to be Adjusted | Adjustment |
|---|---|---|
| S.S.G. 100dB μV Thru Loop Antenna. 1000KHz | SVR 6 | To Indicate "4" |

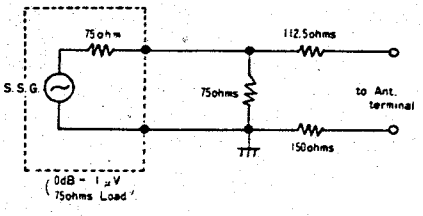
Power Amplifier Idling Current Adjustment

Disconnect the fuse F4 (F5) and connect ampere meter in place of the fuse.
Adjust SVR211 (SVR311) to 35 mA.

UKW (FM) RF ALIGNMENT

| Step | Signal Input | Frequency of S.S.G. | Dial Setting | Component to be Adjusted for Max. Output |
|---|---|---|---|---|
| 1 | Thru Dummy Antenna Fig. 2 | 87.5MHz | Lower-End | Osc. Coil L-2 |
| 2 | | 109 MHz | Upper-End | Osc. Trim. CT-3 |
| 3 | | 90 MHz | 90 MHz | RF. Coil, T-1, T-2 |
| 4 | | 106 MHz | 106 MHz | RF. Trim. CT-1, CT-2 |

Fig. 2



# ALIGNMENT PROCEDURES

## UKW (FM) IF ALIGNMENT

| STEP | Alignment | Test Equipment | Adjustment |
|---|---|---|---|
| 1 | Response | Sweep Generator:TP-2 * | T-3 |
| | | Osciloscope :TP-4 | Max. |
| 2 | "S"Curve | Sweep Generator:TP-2 | L-5 |
| | | Osciloscope :TP-3 | Symmetrical "S" |

*Through 1 K ohms

## UKW (FM) TUNING VOLTAGE ALIGNMENT

| STEP | Alignment | Dial Setting | Test Point | |
|---|---|---|---|---|
| | | | Equipment | Adjustment |
| 1 | V-High | High-End (Manual) | TP-1 | SVR-103 28.0V |
| 2 | V-Low | Low-End (Preset) | TP-1 | SVR-7 2.80V |
| 3 | | Low-End (Manual) | TP-1 | SVR-5 2.80V |

## UKW (FM) Signal Meter Alignment

| Input Signal | Component to be Adjusted | Adjustment |
|---|---|---|
| S.S.G. 80dB $\mu$V, 98MHz, Thru Dummy Antenna (Fig. 2) | SVR-3 | To Indicate "5" |

## UKW (FM) Frequency Meter Alignment

| STEP | Alignment | Tuning Frequency | Component to be Adjusted | Indication |
|---|---|---|---|---|
| 1 | Low | 88MHz | SVR-1 | 88 |
| 2 | High | 108MHz | SVR-2 | 108 |

Repeat Step 1 and 2

## UKW (FM) Muting Alignment

| Input Signal | Component to be Adjusted | Adjustment |
|---|---|---|
| S.S.G. 30dB $\mu$V, 98MHz, Thru Dummy Antenna (Fig. 2) | SVR-4 | Nute On |

## UKW (FM) Stereo Separation

| Step | Subject | Equipment | Test Point | Adjustment |
|---|---|---|---|---|
| 1 | P.L.L. | Counter | TP-5 | 19KHz |
| 2 | Separation | FM Stereo S.G. | Output | Max. Separation |

## PHONO output level alignment

| Input Signal | Component to be Adjusted | Test Point | Adjustment |
|---|---|---|---|
| 50mm/sec (cutting) | SVR291 (391) | line output terminal | 300mV |

## Cassette Alignment

(a) Output level alignment

| Input Signal | Component to be Adjusted | Test Point | Adjustment |
|---|---|---|---|
| 200nwb/m (Dolby level Calibration) | SVR401 (501) | TP402 (502) | 580mV |

(b) Bias current alignment

| Setting | Test Point | Component to be Adjusted | Adjustment |
|---|---|---|---|
| Rec mode & $Fe_2O_3$ | TP401 (501) | ① L401 (501) | Maximum |
| | | ② L401 (501) (Beat cut SW to the other position) | equal with Bias voltage in any position ① or ② |
| | | ③ SVR551 (552) | 4.5mV |

(c) Level meter alignment

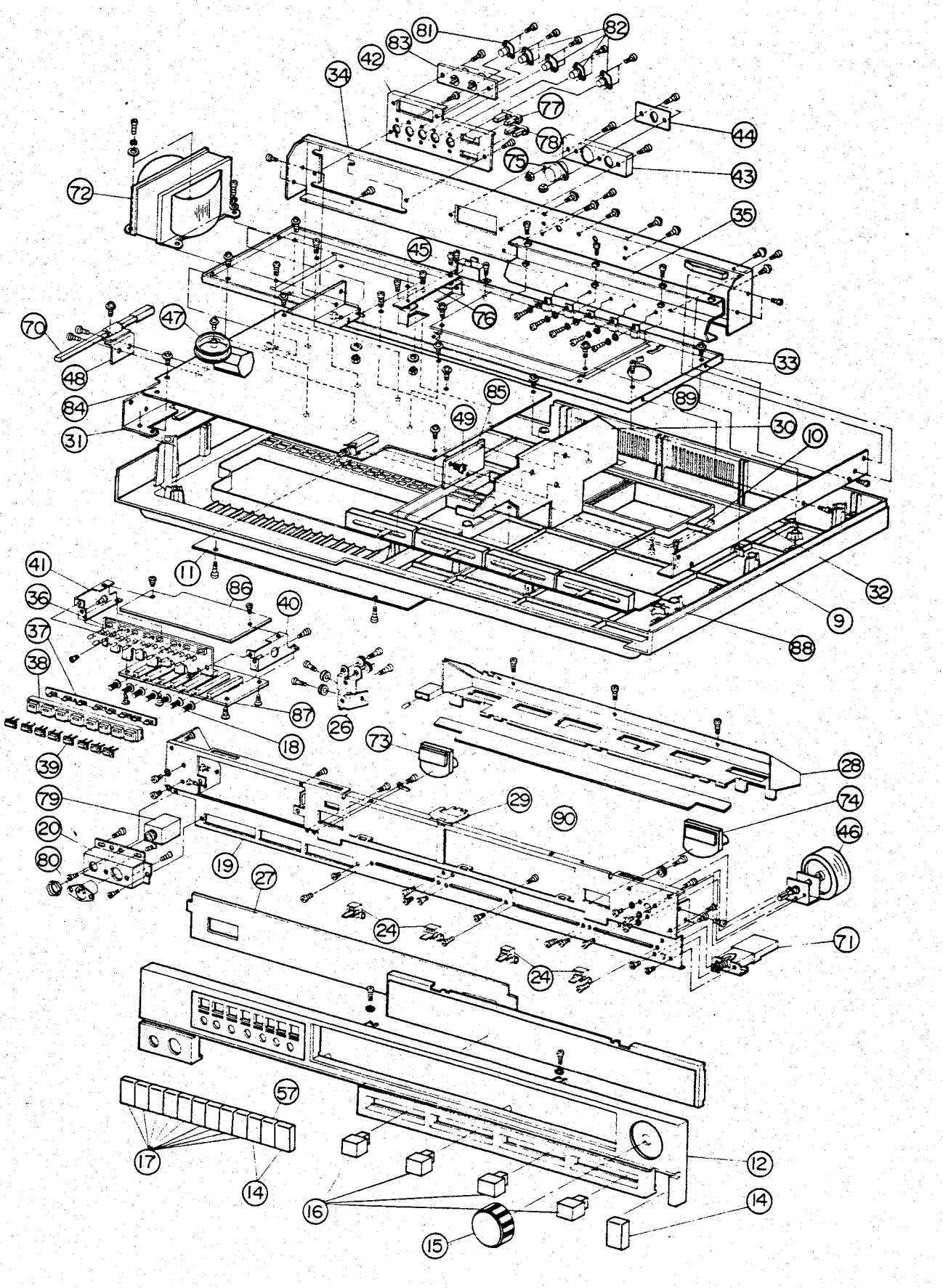
| Input Signal | Setting Rec volume | Component to be adjusted | Adjustment |
|---|---|---|---|
| 316mV (AUX) | 580mV at TP402 (502) | SVR403 (503) | +3dB DOLBY LEVEL, at level meter |

(d) R/PB level alignment

| ① Record | ② Play back | ③ |
|---|---|---|
| Input Signal : 316mV (AUX) Setting Rec Volume:580mV at TP402 (502) | Measure the output level at TP402 (502) | Repeat Step 1, 2. until playback output reading at TP402 (502) is 580mV by adjusting SVR402 (502) |

NOTE ( ) bracket····· Right channel
non bracket····· Left channel

# EXPLODED VIEW (CABINET & CHASSIS)



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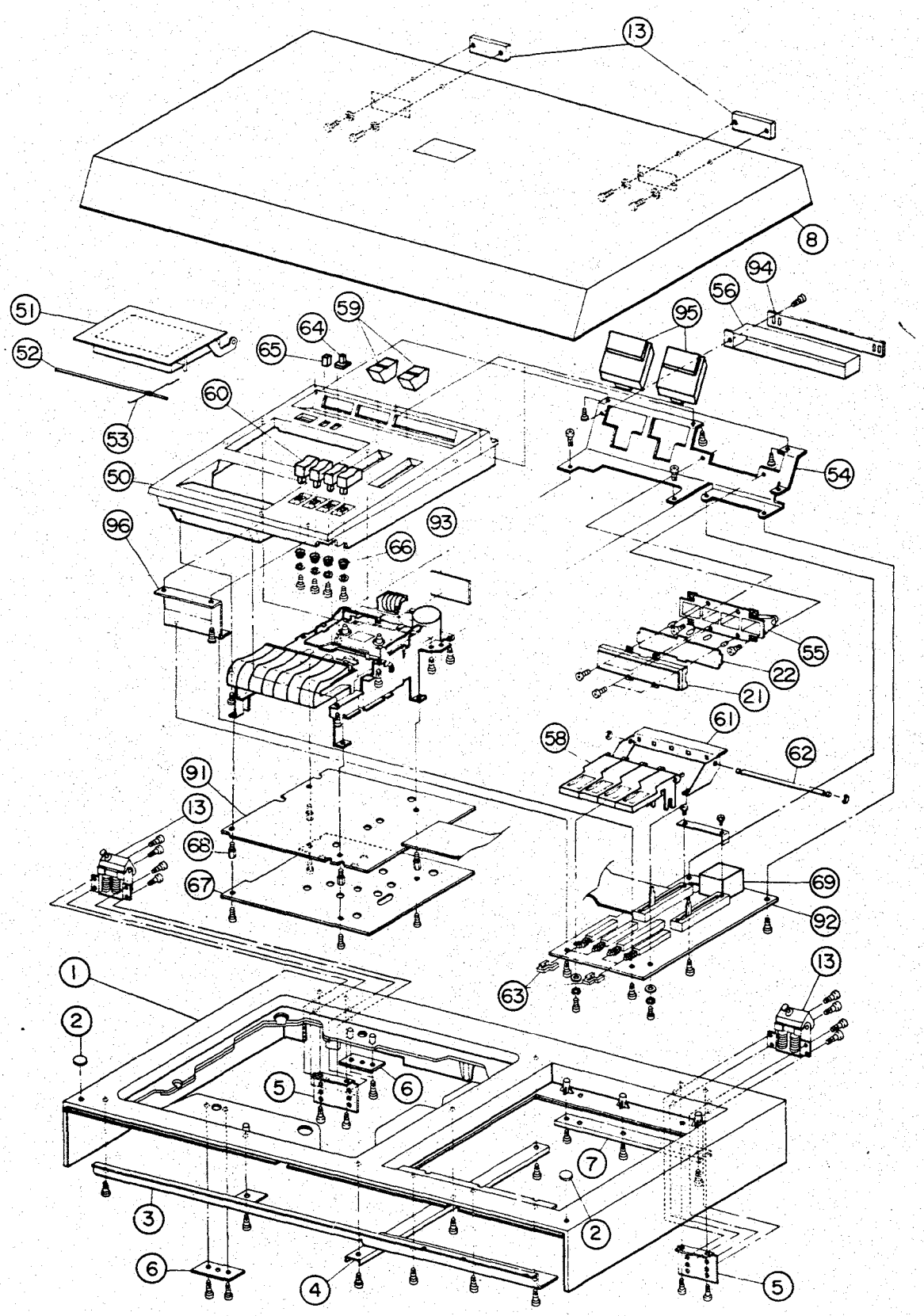

# PARTS LIST

| Key No. | Ref. No. | Part No. | Description | Q'ty |
|---|---|---|---|---|
| **PACKAGE PARTS** | | | | |
| | | R-4772755 | Instruction book | 1 |
| | | R-4073960 | Individual carton | 1 |
| | | R-4171507 | Styro-foam cushion, Unit bottom | 1 |
| | | R-4171187 | Styro-foam cushion, Dust cover left | 1 |
| | | R-4171188 | Styro-foam cushion, Dust cover right | 1 |
| | | R-4772432 | Caution tag, Power & pulley | 1 |
| | | R-357359 | Polyethylene bag, Unit | 1 |
| | | | Polyethylene bag, 320x360, Turn table | 1 |
| | | R-357361 | Sheet cover, Dust cover | 1 |
| | | R-357360 | Polyethylene bag, Dust cover | 1 |
| | | | Polyethylene bag, 165x240 Instruction book | 1 |
| | | | Polyethylene bag, 100x240, AC cord | 1 |
| | | R-357362 | Cover, Front panel | 1 |
| | | | Polyethylene bag, 50x50, Weight | 1 |
| | | | Polyethylene bag, 100x240, Antenna lead | 1 |
| | | | Polyethylene bag, 60x145x2t, Counter Weight & Head sheel | 2 |
| | | | Polyethylene bag, 50x50, Pulley | 1 |
| **ACCESSORY PARTS** | | | | |
| | | R-S871212 | Antenna lead assembly, AM | 1 |
| | | R-S07176 | Cassette tape | 1 |
| | | R-S17102 | AC adaptor | 1 |
| **CABINET APPEARANCE PARTS** | | | | |
| 1 | | R-A72802 | Cabinet assembly | 1 |
| 2 | | R-447977 | Cushion, Dust cover | 2 |
| 3 | | R-1270496a | Metal bracket, Cabinet front | 1 |
| | | | Tap. Screw, Pan Hd., 3x10 | 5 |
| 4 | | R-1270497 | Metal bracket, Cabinet center | 1 |
| | | | Tap. Screw, Pan Hd., 3x10 | 3 |
| 5 | | R-1270498 | Metal bracket, Hinge | 2 |
| | | | Tap. Screw, Pan Hd., 3x10 | 4 |
| 6 | | R-118122a | Metal bracket, Player | 2 |
| | | | Tap. Screw, Pan Hd., 3x10 | 4 |
| 7 | | R-1270499a | Metal bracket, Cassette panel rear | 1 |
| | | | Tap. Screw, Pan Hd., 3x10 | 3 |
| 8 | | R-A72803 | Dust cover assembly | 1 |
| 9 | | R-A72399 | Bottom cover assembly | 1 |
| 10 | | R-1270529 | Ventulation, Amp. P. C. B. | 1 |
| | | | Tap. Screw, Pan Hd., 3x8 | 2 |
| 11 | | R-1270530 | Ventulation, Tuner P. C. B. | 1 |
| | | | Tap. Screw, Pan Hd., 3x8 | 2 |
| 12 | | R-A72804 | Front panel assembly | 1 |
| | | | Tap. Screw, Oval Hd., 3x10 | 8 |
| | | | Tap. Screw, Pan Hd., 3x8 | 2 |
| | | | Washer, External Tooth Lock, 3 | 2 |
| | | R-4772139 | Caution label, Player | 2 |
| 13 | | R-S871166 | Hinge assembly | 2 |
| | | | Tap. Screw, Pan Hd. with Washer "A", 4x14 | 4 |
| | | | Nut, Hex Hd., 4 | 4 |
| | | | Tap. Screw, Pan Hd., 3x8 | 8 |
| | | R-357323 | Cover | 2 |
| 15 | | R-A72805 | Knob assembly, Tuning | 1 |
| 16 | | R-3971915 | Knob, Vol./Balance/Bass/Treble | 4 |
| | | | Tap. Screw, Pan Hd. with Washer, 3x10 | 4 |
| | | | Washer, External Tooth Lock, 3 | 4 |
| 17 | | R-3971914 | Knob, Function/Power | 9 |
| 18 | | R-3971464a | Knob, Preset | 7 |
| | | R-4772211 | Label, Dolby | 1 |
| 14 | | R-3971950 | Knob | 3 |
| 57 | | R-3971951 | Knob ON/OFF | 1 |
| | | | Tap. Screw, Oval Hd., 4x16 | 8 |
| | | | Screw, Pan Hd., 4x10 | 2 |
| | | | Washer, Flat, 4x16x1t Cabinet-Bottom cover | 2 |
| | | | Screw, Pan Hd., 4x20 | 2 |
| | | | Washer, Flat, 4x10x0.8t Cabinet-Player | 2 |
| **CHASSIS MECHANICAL PARTS** | | | | |
| 19 | | R-S871169a | Cassis assembly, Front | 1 |
| | | | Tap. Screw, Pan Hd., 3x8 | 1 |
| | | | Tap. Screw, Oval Hd., 3x8 | 4 |
| 20 | | R-1171131 | Metal bracket, Mic/Headphone | 1 |
| | | | Tap. Screw, Oval Hd., 3x8 | 1 |
| | | | Screw, Flat Hd., 3x6 | 1 |
| 21 | | R-387781 | Cover, DOLBY | 1 |
| 22 | | R-S871431 | Indication board, DOLBY | 1 |
| 24 | | R-3971916 | Fix plastic board, Slide VR | 4 |
| 26 | | R-1270507 | Metal bracket, Pulley shaft | 1 |
| | | | Tap. Screw, Pan Hd. with Washer "A", 3x4 | 2 |
| 27 | | R-387774 | Dial scale | 1 |
| | | | Tap. Screw, Pan Hd. with Washer, 3x3 | 1 |
| 28 | | R-1270532 | Reflection plate, Dial | 1 |
| | | | Tap. Screw, Pan Hd., 3x6 | 3 |
| 29 | | R-A72806 | Pointer assembly | 1 |
| 30 | | R-1270508 | Metal bracket, EQ P. C. B. | 1 |
| | | | Tap. Screw, Pan Hd., 3x8 | 2 |
| | | | Tap. Screw, Oval Hd., 3x3 | 2 |
| 31 | | R-1270509 | Metal bracket, Left side | 1 |
| | | | Tap. Screw, Oval Hd., 3x8 | 2 |
| 32 | | R-1270510 | Metal bracket, Right side | 1 |
| | | | Tap. Screw, Oval Hd., 3x3 | 2 |
| 33 | | R-S871170 | Chassis assembly, Center | 1 |
| | | | Tap. Screw, Oval Hd. 3x12 | 9 |
| | | | Tap. Screw, Pan Hd., 4x10 | 4 |
| 34 | | R-277419a | Chassis, Rear | 1 |
| | | | Tap. Screw, Pan Hd., 3x8 | 7 |
| 35 | | R-277443 | Heat sink | 1 |
| | | | Tap. Screw, Pan Hd., 3x8 | 3 |
| | | | Tap. Screw, Pan Hd. with Washer, 3x8 | 3 |
| 36 | | R-3971910 | Holder, Touch sencer | 1 |
| | | | Screw, Flat Hd., 3x6 | 2 |
| 37 | | R-387776 | Cover, Touch sencer | 1 |
| 38 | | R-3971911 | Touch sencer, Top | 1 |
| 39 | | R-3971912 | Touch sencer, Bottom | 8 |
| 40 | | R-1270941 | Metal bracket, Right side Touch/Preset P. C. B. | 1 |
| | | | Tap. Screw, Oval Hd., 3x6 | 1 |
| 41 | | R-1270942 | Metal bracket, Left side Touch/Preset P. C. B. | 1 |
| | | | Tap. Screw, Oval Hd., 3x6 | 1 |
| 42 | | R-1270534 | Metal bracket, Line in/out terminal | 1 |
| | | | Tap. Screw, Pan Hd., 3x8 | 2 |
| | | R-4170360 | Soft tape, F' S meter | 4 |

NOTES : 1. Part orders must contain Model Number, Part Number and Description.
2. Ordering quantity of screws and/or resistors must be multiple of 10 pcs.

# PARTS LIST

| Key No. | Ref. No. | Part No. | Description | Q'ty |
|---|---|---|---|---|
| 43 | | R-1270535 | Metal bracket, AC cord/Power select switch | 1 |
| | | | Tap. Screw, Pan Hd., 3x8 | 2 |
| | | R-3970593 | Lamp holder, Stereo | 1 |
| 44 | | R-1170738 | Cover, Power select switch | 1 |
| | | R-447817 | Bushing, AC cord | 1 |
| 45 | | R-1270090 | Metal bracket, AC cord | 1 |
| | | | Tap. Screw, Pan Hd., 3x8 | 2 |
| | | R-357099 | Fixer, AC cord | 1 |
| | | | Tap. Screw, Pan Hd., 3x12 | 1 |
| 46 | | R-S871428 | Flywheel, Tuning | 1 |
| | | | Tap. Screw, Pan Hd. with Washer "A", 3x6 | 3 |
| | | R-147054-1 | Pulley shaft; 4φx17 | 4 |
| | | R-147054-2 | Pulley shaft, 4φx13.5 | 1 |
| | | R-325017 | Pulley, 11φ | 5 |
| | | R-245215 | Pulley, 14φ | 1 |
| | | R-157189 | Coil spring, Drum | 2 |
| 47 | | R-3970582 | Drum, VC | 1 |
| | | | Screw, Pan Hd. with Washer, 2.6x6 | 1 |
| | | | Dial cord string, 0.5φx2030 | 1 |
| 48 | | R-127355 | Metal bracket, Antenna coil | 1 |
| | | | Tap. Screw, Pan Hd., 3x8 | 2 |
| | | | Washer, Flat, 3.3x10x1t | 1 |
| | | R-257169 | Earth spring, Tuner/Amp. P.C.B. | 2 |
| 49 | | R-377060 | Nylon lutch, EQ P.C.B. mtg. | 3 |
| | | R-377064 | Wire clamper | 3 |
| | | R-377065 | Wire clamper | 5 |
| | | R-1270706 | Shield case, Tuner P.C.B. | 1 |
| | | R-1270705 | Shield plate, Tuner P.C.B. | 1 |
| | | R-357323 | Hole plug | 2 |
| | | | Screw, Flat Hd., 3x6<br>Slide VR-chassis front | 8 |
| | | | Screw, Flat Hd., 3x6<br>Function switch-chassis front | 1 |
| | | | Tap. Screw, Pan Hd. with Washer, 3x8<br>Amp. P.C.B.-Chassis | 2 |
| | | | Screw, Pan Hd., 3x8 | 5 |
| | | | Tap. Screw, Pan Hd. with Washer, 3x8<br>Tuner P.C.B.-Bottom cover | 7 |
| | | | Tap. Screw, Oval Hd., 3x6<br>Preset P.C.B.-Metal bracket | 4 |
| | | | Tap. Screw, Oval Hd., 3x6<br>Touch P.C.B.-Metal bracket | 2 |
| | | | Tap. Screw, Pan Hd., 3x8<br>Cord clip mtg. | 2 |
| 50 | | R-A72807 | Panel assembly, Cassette | 1 |
| 51 | | R-A72809 | Cassette lid Assembly | 1 |
| 52 | | R-157797a | Shaft, Cassette lid | 1 |
| 53 | | R-157798a | Spring, Shaft | 1 |
| | | | Tap. Screw, Pan Hd. with Washer, 3x8 | 2 |
| 54 | | R-1270940 | Metal bracket, Level meter | 1 |
| | | | Tap. Screw, Pan Hd. with Washer "A", 3x6 | 2 |
| 55 | | R-3971935 | Lamp holder, Dolby | 1 |
| | | | Tap. Screw, Pan Hd., 3x8 | 2 |
| 56 | | R-1270944 | Reflection plate, Level meter | 1 |
| | | | Tap. Screw, Pan Hd. with Washer "F", 3x8 | 1 |
| | | | Screw, Flat Hd., 2.6x6 | 4 |
| 59 | | R-3971934 | Knob, Rec vol. | 2 |
| 60 | | R-3971932 | Fix plastic board, Tape select switch | 4 |
| 61 | | R-1471003 | Metal bracket, Tape select knob | 1 |
| | | | Screw, Pan Hd. with Washer "F", 2.6x6 | 2 |
| 62 | | R-157802 | Shaft, Tape select knob | 1 |
| | | | E-Ring, 3 | 2 |
| 63 | | R-3971468 | Knob, DOLBY select | 4 |
| 64 | | R-3971942 | Knob, Tape counter | 1 |
| 65 | | R-3971943 | Knob, Reset | 1 |
| 67 | | R-1270607 | Shield plate, Cassette | 1 |
| | | | Screw, Round Hd., 2.6x4 | 4 |
| 68 | | R-247144 | Special screw, Cassette P.C.B. mtg. | 4 |
| 69 | | R-127951a | Shield case, Cassette OSC | 1 |
| | | | Tap. Screw, Round Hd., 3x30 | 2 |
| | | | Cassette panel-Bottom cover rear | |
| | | | Tap. Screw, Round Hd., 3x16 | 2 |
| | | | Cassette panel-Bottom cover front | |
| | | | Tap. Screw, Pan Hd., 3x10 | 4 |
| | | | Cassette panel-Metal brabket level meter | |
| | | | Tap. Screw, Pan Hd., 3x12 | 6 |
| | | | Cassette panel-Mechanism cassette | |
| | | | Screw, Pan Hd., 3x4 | 1 |
| | | | Screw, Pan Hd., 3x6 | 2 |
| | | | Cassette switch P.C.B.-Metal bracket | |
| | | | Screw, Pan Hd., 2.6x4 | 2 |
| | | | Auto stop P.C.B.-Metal bracket tape counter | |
| | | | Tap. Screw, Pan Hd., 3x8 | 4 |
| | | | Cassette switch P.C.B.-Panel cassette | |
| | | | Tap. Screw, Pan Hd., 3x12 | 1 |
| | | | Metal bracket mechanism right-panel cassette | |
| 58 | | R-3971933a | Fix plastic board Dolby SW | 4 |
| 66 | | R-157955 | Coil spring Tape select SW | 4 |
| 96 | | R-1270943 | Metal bracket Cassette switch p.c.b | 1 |

## CHASSIS ELECTRICAL PARTS

| | | | | |
|---|---|---|---|---|
| 70 | L901 | R-S871229 | Antenna coil assembly, Ferrite, LW/MW | 1 |
| | | | Tap. Screw, Pan Hd. with Washer, 3x10 | 1 |
| 71 | S901 | R-S47328 | Push switch, Power | 1 |
| | | | Screw, Flat Hd., 3x4 | 2 |
| 72 | | R-W77558 | Power transformer | 1 |
| | | | Screw, Pan Hd. with Washer "A", 4x10 | 4 |
| | | | Nut, Hex Hd., 4 | 4 |
| | | | Washer, Flat, 4x16x1t | 8 |
| 73 | | R-S57146 | Meter, F meter | 1 |
| 74 | | R-S57144 | Meter, S meter | 1 |
| | | R-S37089 | AC cord assembly | 1 |
| 75 | S902 | R-S47222-1 | Rotary switch, Voltage select | 1 |
| | | | Screw, Pan Hd., 3x8 | 2 |
| | | | Nut, Hex Hd., 3 | 2 |
| 76 | | R-S17272 | Terminal plate | 1 |
| | | | Tap. Screw, Pan Hd., 3x8 | 2 |
| | | R-377046a-5 | Housing, 5P, CS-1, 3, 14, 19, 18 | 5 |
| | | R-377046a-3 | Housing, 3P, CS-6, 9, 8, 21, 15, 16 | 6 |
| | | R-377046a-4 | Housing, 4P, CS-4, 2 | 2 |
| | | R-377046a-8 | Housing, 8P, CS-10, 5 | 2 |
| | | R-377046a-6 | Housing, 6P, CS-7, 24 | 2 |
| | | R-257149 | Terminal, Housing | 76 |
| | | R-S27222 | Socket, CS-22, Motor | 1 |
| | PL101 | R-S17078-1 | Pilot lamp, 6V 21mA, FM ST | 1 |
| 77 | | R-S27204 | Socket, FM antenna | 1 |
| 78 | | R-S27258 | Socket, AM antenna | 1 |
| 79 | | R-S27164 | Jack, Headphone | 1 |
| 80 | | R-S27259 | Socket, Mic | 1 |
| | | | Screw, Flat Hd., 2.6x4 | 2 |

NOTES : 1. Part orders must contain Model Number, Part Number and Description.
2. Ordering quantity of screws and/or resistors must be multiple of 10 pcs.

# PAPTS LIST

| Key No. | Ref. No. | Part No. | Description | Q'ty |
|---|---|---|---|---|
| 81 | | R-S2728 | Socket, AUX IN OUT | 1 |
| | | | Tap. Screw, Pan Hd., 3x10 black | 2 |
| 82 | | R-S27058 | Jack, Speaker | 4 |
| | | | Tap. Screw, Pan Hd., 3x10 black | 8 |
| 83 | | R-S17047 | Terminal, AUX OUT | 1 |
| | | | Tap. Screw, Pan Hd., 3x10 black | 2 |
| | F4,5 | R-S17235 | Fuse, 2A, Amp. P.C.B., 5.2φx20 | 2 |
| | | R-377052-4 | Housing, 4P, CS-11, 20, 17 | 3 |
| | | R-377052-3 | Housing, 3P, CS-12 | 1 |
| | | R-257158 | Terminal, Housing 4P & 3P | 16 |
| | | R-S27263 | Connector receptacle, CS-13 | 1 |
| | PL1001-PL1008 | R-S17233 | Pilot lamp, 6V 21mA, Touch P.C.B. | 8 |
| | F2,6 | R-S17074 | Fuse, 315mA, Amp. P.C.B., 5φx20 | 2 |
| | F1,3 | R-S17169 | Fuse, 4A, Amp. P.C.B., 5.2φx20 | 2 |
| | PL403~406 | R-S17236 | Pilot lamp, Dolby Cr02 FeCr Rec., 14V 40mA | 4 |
| | S406 | R-S47351 | Push switch, Memory SW | 1 |
| | | | Screw, Flat Hd., 3x4 | 2 |
| 95 | | R-S57145 | Level meter | 2 |
| | | R-S27264 | Plug, 6P, CP-13 | 1 |
| | | R-S1788 | Pin, Plug 6P, CP-13 | 6 |
| | | R-S1787 | Pin, Housing, CS-13 | 6 |
| RESISTORS (Resistors are of carbon type, ±10% allowance and ¼W unless otherwise noted.) | | | | |
| | R901,902 | | 330 K ohm | 2 |
| | R903,904 | | 47 K ohm | 2 |
| CAPACITORS | | | | |
| | C901 | | Ceramic, 2pF, ±0.25pF, 50V, SL | 1 |
| | C902 | | Oil condecer, ECN-C4A473 0.47mfd, ±20%, 400V | 1 |
| | | R-S17243 | Cord clip | 7 |
| | | R-377063 | Nylon band | 2 |
| TUNER P.C.B. ASSEMBLY | | | | |
| 84 | | R-A72405 | Circuit board assembly, Tuner | 1 |
| | T1 | R-W27079 | Antenna coil, Bobbin, FM | 1 |
| | T2 | R-W9713 | VHF coil | 1 |
| | T3 | R-W5T787 | IF transformer | 1 |
| | L1,3 | R-W1780 | Choke coil, 2.2μH | 2 |
| | L2 | R-W9714 | VHF coil | 1 |
| | L4 | R-W1779 | Choke coil, 18μH | 1 |
| | L5 | R-W5T776 | Quad coil | 1 |
| | CF1 | R-S17065 | Ceramic filter | 1 |
| | CF2 | R-S17146 | Ceramic filter | 1 |
| | CT1,2,3 | R-C0716 | Trimmer | 3 |
| | VR1, VC1,2 | R-C1728 | Variable capacitor | 1 |
| | | R-S27207-8 | Plug, 8P, CP-5, 10 | 2 |
| | S1-12 | R-S47321 | Push switch, Function | 1 |
| | SVR1,5,6,101,103 | R-R110729 | Preset resistor, 5K-B | 5 |
| | SVR2,4 | R-R110735 | Preset resistor, 20K-B | 2 |
| | SVR3 | R-R110724 | Preset resistor, 10K-B | 1 |
| | SVR7,102 | R-R110727 | Preset resistor, 1K-B | 2 |
| | CT4,9 | R-C0716 | Trimmer | 2 |
| | CT5,6,7,8 | R-C0729 | Trimmer | 2 |
| | L6 | R-W1740 | Choke coil | 1 |
| | T5 | R-W8725 | OSC coil, LW | 1 |
| | T6 | R-W8775 | OSC coil, MW | 1 |
| | T7 | R-W8733 | OSC coil, SW | 1 |
| | T4 | R-W2752 | Antenna coil, Bobbin, SW | 1 |
| | CF3 | R-W5CF701 | Ceramic filter | 1 |
| | CF4 | R-S17222 | Ceramic filter | 1 |

| Key No. | Ref. No. | Part No. | Description | Q'ty |
|---|---|---|---|---|
| | T8 | R-W5T312 | IF transformer | 1 |
| | | R-S27207-4 | Plug, 4P, CP-2, 4 | 2 |
| | | R-S27207-5 | Plug, 5P, CP-1, 3 | 2 |
| | L101,102 | R-W1751 | Choke coil, 40mH | 2 |
| | | R-S27207-3 | Plug, 3P, CP-8, 6, 9 | 3 |
| | | R-S27207-6 | Plug, 6P, CP-7 | 1 |
| | | R-S27206-4 | Plug, 4P, CP-11, 20 | 2 |
| | | R-S27206-3 | Plug, 3P, CP-12 | 1 |
| | | R-S1787 | Miniature pin | 6 |
| SEMICONDUCTORS | | | | |
| | Q1 | | FET, JF1033 | 1 |
| | Q2 | | Transistor, 2SC668 D, E | 1 |
| | Q3,6 | | Transistor, 2SC930 D, E | 2 |
| | Q4 | | Transistor, 2SC1318 R | 1 |
| | Q5,7 | | Transistor, 2SC536 E | 2 |
| | Q8 | | Transistor, 2SA702 F | 1 |
| | Q9 | | Transistor, 2SC536 E, F | 1 |
| | IC1 | | Integrated circuit, LA1230 D | 1 |
| | Q10,11,12,13 | | Transistor, 2SC930 | 4 |
| | D1,2,3 | | Diode, 1SV55 | 3 |
| | D4 | | Diode, 1S2139C | 1 |
| | D5,7,9,10,11,12 | | Diode, 1S1588 or 1S2473 | 6 |
| | D13,18,6 | | Diode, 1S1588 | 3 |
| | D14,101 | | Diode, 1S1588 or 1S2473 | 2 |
| | D15,16 | | Diode, 1S1588 AM | 2 |
| | Q101,102,105 | | Transistor, 2SC536 F | 3 |
| | IC100 | | Integrated circuit, LA3350 | 1 |
| | Q103,104 | | Transistor, 2SC1740 LNS | 2 |
| | IC101,102 | | Integrated circuit, μPC1023 H | 2 |
| | Q106 | | Transistor, 2SD438 E | 1 |
| | D181 | | Diode, WZ058 | 1 |
| | D191,192 | | Diode, EQB01-12 | 2 |
| RESISTORS (Resistors are of carbon type, ±10% allowance and ¼W unless otherwise noted.) | | | | |
| | R18 | | 56 ohm | 1 |
| | R13,19,22,78,83 | | 100 ohm | 5 |
| | R31,32,59,69,70 | | 330 ohm | 5 |
| | R56,117,118 | | 470 ohm | 3 |
| | R7,84,104,131,132,163,164,86,121,122,141,142 | | 1 K ohm | 12 |
| | R17,68 | | 1.2 K ohm | 2 |
| | R54,71,85,91 | | 2.2 K ohm | 4 |
| | R34,182 | | 2.7 K ohm | 2 |
| | R16,21,30,57,74,108,111,112,183,37 | | 3.3 K ohm | 10 |
| | R38,53,76,119,120,186 | | 3.9 K ohm | 6 |
| | R29,35,45,47,48,49,36,67,139,140,82 | | 5.6 K ohm | 11 |
| | R23,101,102,1 | | 8.2 K ohm | 4 |
| | R24,43,51,61,161,162,173,174,55 | | 10 K ohm | 9 |
| | R12,15,28,133,134,143,144,185 | | 18 K ohm | 8 |
| | R10,60 | | 39 K ohm | 2 |
| | R20,96 | | 47 K ohm | 2 |
| | R25,39,41,42,52 | | 56 K ohm | 5 |
| | R2,6,14,26,33,40,80,105,165,166,171,172 | | 100 K ohm | 12 |
| | R88 | | 15 K ohm | 1 |
| | R11 | | 220 K ohm | 2 |
| | R8 | | 560 K ohm | 1 |
| | R9 | | 2.2 M ohm | 1 |
| | R5 | | 56 ohm | 1 |
| | R50 | | 10 K ohm (R25 type) | 1 |
| | R4 | | 100 ohm | 1 |
| | R63 | | 120 ohm | 1 |

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# PARTS LIST

| Key No. | Ref. No. | Part No. | Description | Q'ty |
|---|---|---|---|---|
| | R81 | | 560 ohm | 1 |
| | R65 | | 820 ohm | 1 |
| | R72, 151, 152, 94 | | 1.5 K ohm | 4 |
| | R75, 87 | | 1.8 K ohm | 2 |
| | R95 | | 6.8 K ohm | 1 |
| | R66, 113, 114 | | 22 K ohm | 3 |
| | R73, 79, 137, 138 | | 82 K ohm | 4 |
| | R62 | | 2.2 K ohm (R25 type) | 1 |
| | R89, 195 | | 10 ohm | 2 |
| | R64 | | 82 ohm | 1 |
| | R90, 58 | | 22 K ohm | 2 |
| | R115, 116, 187 | | 150 K ohm | 3 |
| | R135, 136 | | 330 K ohm | 2 |
| | R169, 170 | | 820 K ohm | 2 |
| | R184 | | 4.7 K ohm | 1 |
| | R27, 92, 100 | | Solid, 100 ohm, ±10%, $\frac{1}{2}$W | 3 |
| | R194 | | Carbon, 560 ohm, ±10%, $\frac{1}{2}$W | 1 |
| | R130, 191, 192 | | Metal oxide film, 470 ohm, ±10% 3W | 3 |
| | R129 | | Metal oxide film, 220 ohm, ±10%, 1W | 1 |
| | R160 | | Metal oxide film, 1 K ohm, ±10%, 1W | 1 |
| | R193 | | Metal oxide film, 820 ohm, ±10%, 2W | 1 |
| | R198, 199 | | Metal oxide film, 220 ohm, ±10%, 2W | 2 |
| | R181 | | Metal film, 150 ohm, ±10%, $\frac{1}{4}$W Fuse | 1 |
| | R188 | | Metal film, 220 ohm, ±10%, $\frac{1}{4}$W Fuse | 1 |
| | CAPACITORS | | | |
| | C2 | | Ceramic, 390 pF, ±10%, 50V, YW | 1 |
| | C18, 60 | | Ceramic, 10 pF, ±10%, 50V, SL | 2 |
| | C15, 98 | | Ceramic, 20 pF, ±10%, 50V, SL | 2 |
| | C17 | | Ceramic, 35 pF, ±10%, 50V, SL | 1 |
| | C9, 28, 169, 170 | | Ceramic, 100 pF, ±10%, 50V, SL | 4 |
| | C92, 93 | | Ceramic, 15 pF, ±10%, 50V, SL | 2 |
| | C97, 73 | | Ceramic, 12 pF, ±10%, 50V, SL | 2 |
| | C145, 146 | | Ceramic, 820 pF, ±10%, 50V, YW | 2 |
| | C163, 164 | | Ceramic, 47 pF, ±10%, 50V, SL | 2 |
| | C14 | | Ceramic, 1.5 pF, ±0.25 pF, 50V, SL | 1 |
| | C93, 42 | | Ceramic, 2 pF, ±0.25 pF, 50V, SL | 2 |
| | C1, 7 | | Ceramic, 4 pF, ±0.5 pF, 50V, SL | 2 |
| | C8, 20, 68 | | Ceramic, 5 pF, ±0.5 pF, 50V, SL | 3 |
| | C19 | | Ceramic, 6 pF, ±0.5 pF, 50V, SL | 1 |
| | C22 | | Ceramic, 0.001 mfd, ±20%, 50V, E | 1 |
| | C23, 24, 25, 26, 27, 31, 32 | | Ceramic, 0.02 mfd, ±20%, 12.5V, BC | 7 |
| | C61 | | Ceramic, 8 pF, ±1 pF, 50V, SL | 1 |
| | C72 | | Ceramic, 0.001 mfd, ±10%, 50V, YW | 1 |
| | C165, 166 | | Ceramic, 470 pF, ±20%, 50V, YW | 2 |
| | C71, 74, 83, 94, 95, 96, 183, 184, 187, 191, 30, 33, 34, 35, 40 | | Ceramic, 0.04 or 0.039 mfd, +80 −20%, 50V, FZ | 15 |
| | C79 | | Ceramic, 0.022 mfd, +80 −20%, 50V, FZ | 1 |
| | C4, 5, 10, 11, 12, 16, 41 | | Ceramic, 0.02 mfd, +80 −20%, 50V, FZ | 7 |
| | C81 | | Ceramic, 0.01 mfd, +80 −20%, 50V, FZ | 1 |
| | C77 | | Styrol, 4200 pF, ±5%, 50V | 1 |
| | C69 | | Styrol, 100 pF, ±5%, 50V | 1 |
| | C75 | | Styrol, 350 pF, ±5%, 50V | 1 |
| | C76 | | Styrol, 200 pF, ±5%, 50V | 1 |
| | C101 | | Styrol, 1400 pF, ±10%, 50V | 1 |
| | C102 | | Styrol, 600 pF, ±10%, 50V | 1 |
| | C66 | | Mylar, 0.0022 mfd, ±20%, 50V | 1 |
| | C65 | | Mylar, 0.0033 mfd, ±20%, 50V | 1 |
| | C64, 67, 70, 85, 86, 88 | | Mylar, 0.01 mfd, ±20%, 50V | 6 |
| | C82 | | Mylar, 0.022 mfd, ±20%, 50V | 1 |
| | C91 | | Mylar, 0.0068 mfd, ±10%, 50V | 1 |
| | C90, 117, 118 | | Mylar, 0.01 mfd, ±10%, 50V | 3 |
| | C103, 187 | | Mylar, 0.047 mfd, ±10%, 50V | 2 |
| | C109, 110 | | Mylar, 0.0022 mfd, ±10%, 50V | 2 |
| | C111, 112 | | Mylar, 0.0056 mfd, ±10%, 50V | 2 |
| | C115, 116 | | Mylar, 0.001 mfd, ±10%, 50V | 2 |
| | C143, 144 | | Mylar, 0.15 mfd, ±10%, 50V | 2 |
| | C131, 132, 167, 168 | | Electrolytic 50V/1 mfd | 4 |
| | C13 | | Electrolytic 35V/0.1 mfd Tantalum | 1 |
| | C37, 106 | | Electrolytic 16V/3.3 mfd Alsicon | 2 |
| | C36, 38 | | Electrolytic 16V/1 mfd Alsicon | 2 |
| | C21 | | Electrolytic 10V/0.1 mfd Alsicon | 1 |
| | C39 | | Electrolytic 10V/4.7 mfd | 1 |
| | C29 | | Electrolytic 10V/1 mfd | 1 |
| | C80 | | Electrolytic 6.3V/4.7 mfd | 1 |
| | C89, 87 | | Electrolytic 10V/1 mfd | 2 |
| | C100 | | Electrolytic 16V/330 mfd | 1 |
| | C119 | | Electrolytic 16V/2.2 mfd Alsicon | 1 |
| | C104 | | Electrolytic 16V/0.47 mfd Alsicon | 1 |
| | C105 | | Electrolytic 16V/0.22 mfd Alsicon | 1 |
| | C113, 114 | | Electrolytic 16V/1 mfd | 2 |
| | C107, 108 | | Electrolytic 16V/3.3 mfd | 2 |
| | C129, 130 | | Electrolytic 35V/100 mfd | 2 |
| | C137, 138 | | Electrolytic 35V/10 mfd | 2 |
| | C160 | | Electrolytic 35V/220 mfd | 1 |
| | C161, 162 | | Electrolytic 25V/1 mfd Alsicon | 2 |
| | C181 | | Electrolytic 50V/47 mfd | 1 |
| | C182 | | Electrolytic 35V/47 mfd | 1 |
| | C185 | | Electrolytic 35V/22 mfd | 1 |
| | C193, 194 | | Electrolytic 16V/470 mfd | 2 |
| | C186 | | Electrolytic 35V/2.2 mfd Tantalum | 1 |
| | C6 | | Electrolytic 35V/3.3 mfd Tantalum | 1 |
| | C84 | | Mylar, 0.039 mfd, ±20%, 50V | 1 |
| | **EQ P. C. B. ASSEMBLY** | | | |
| 85 | | R-A72406 | Circuit board assembly, EQ | 1 |
| | SVR291, 391 | R-R110737 | Preset resistor, 500 ohm | 2 |
| | | R-S27207-3 | Plug, 3P, CP-21 | 1 |
| | SEMICONDUCTORS | | | |
| | IC291, 391 | | Integrated circuit, μPC1024H | 2 |
| | RESISTORS | | | |
| | R295, 395 | | Carbon, 120 K ohm, ±5%, $\frac{1}{4}$W | 2 |
| | R296, 396, 298, 398 | | Carbon, 18 K ohm, ±5%, $\frac{1}{4}$W | 4 |
| | R293, 393 | | Carbon, 100 K ohm, ±5%, $\frac{1}{4}$W | 2 |
| | R294, 394 | | Carbon, 820 K ohm, ±5%, $\frac{1}{4}$W | 2 |
| | R292, 392 | | Carbon, 1 K ohm, ±5%, $\frac{1}{4}$W | 2 |
| | R291, 391, 297, 397 | | Carbon, 47 K ohm, ±5%, $\frac{1}{4}$W | 4 |
| | CAPACITORS | | | |
| | C296, 396 | | Mylar, 0.0047 mfd, ±5%, 50V | 2 |
| | C295, 395 | | Mylar, 0.018 mfd, ±5%, 50V | 2 |
| | C298, 398 | | Ceramic, 470 pF, ±10%, 50V, YW | 2 |
| | C292, 392 | | Ceramic, 47 pF, ±10%, 50V, SL | 2 |
| | C291, 391 | | Electrolytic 16V/4.7 mfd Tantalum | 2 |
| | C293, 393 | | Electrolytic 10V/10 mfd | 2 |
| | C297, 397 | | Electrolytic 35V/10 mfd | 2 |
| | **TOUCH P. C. B. ASSEMBLY** | | | |
| 86 | | R-A72407 | Circuit board assembly, Touch | 1 |
| | | R-S37157 | P. C joinner, 5P | 2 |
| | | R-S27250 | Socket, Pilot lamp | 16 |
| | SEMICONDUCTORS | | | |
| | IC1001 | | Integrated circuit, HA1190 | 1 |
| | IC1002 | | Integrated circuit, HA1194 | 1 |
| | D1001 | | Diode, IS1588 | 1 |
| | RESISTORS (Resistors are of carbon type, ±10% allowance and $\frac{1}{4}$W unless otherwise noted.) | | | |
| | R1001 ~ 1008, 1017 | | 2.2 M ohm | 9 |
| | R1022 | | 220 ohm | 1 |
| | R1020 | | 1 K ohm | 1 |

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# PARTS LIST

| Key No. | Ref. No. | Part No. | Description | Q'ty |
|---|---|---|---|---|
| | R1021 | | 15 K ohm | 1 |
| | R1023 | | 8.2 K ohm | 1 |
| | R1009 ~ 1016 | | Solid, 10 M ohm, ±20%, ½W | 8 |
| | R1019 | | Metal film, 47 ohm, ±10%, ½W Fuse | 1 |
| | CAPACITORS | | | |
| | C1001 ~ 1008 | | Ceramic, 470 pF, ±10%, 50V, YW | 8 |
| | C1009, 1011, 1012 | | Ceramic, 0.022 mfd, +80 −20%, 50V, FZ | 3 |
| | C1010 | | Electrolytic 16V/100 mfd | 1 |
| | **PRESET P. C. B. ASSEMBLY** | | | |
| 87 | | R-A72408 | Circuit board assembly, Preset | 1 |
| | VR 1101-1107 | R-R110734 | Variable resistor, 100K-B | 7 |
| | SEMICONDUCTORS | | | |
| | D1101 ~ 1107 | | Diode, IS1588 | 7 |
| | RESISTORS (Resistors are of carbon type, ±10% allowance and ¼W unless otherwise noted.) | | | |
| | R1101 ~ 1107 | | 4.7 K ohm | 7 |
| | **TONE P. C. B. ASSEMBLY** | | | |
| 88 | | R-A72409 | Circuit board assembly, Tone | 1 |
| | | R-S27207-5 | Plug, 5P, CP-14, 19 | 2 |
| | VR251 | R-R160717 | Variable resistor, 50K-Ax2 | 1 |
| | VR252, 253 | R-R160715 | Variable resistor, 50K-Ax2 | 2 |
| | VR254 | R-R160716 | Variable resistor, 50K-M, N | 1 |
| | SEMICONDUCTORS | | | |
| | Q261, 361, 262, 362 | | Transistor, 2SC536 F | 4 |
| | RESISTORS | | | |
| | R262, 362 | | Carbon, 220 K ohm, ±5%, ¼W | 2 |
| | R263, 363, 267, 367 | | Carbon, 1 K ohm, ±5%, ¼W | 4 |
| | R268, 368 | | Carbon, 680 ohm, ±5%, ¼W | 2 |
| | R266, 366 | | Carbon, 10 K ohm, ±5%, ¼W | 2 |
| | R264, 364 | | Carbon, 1 M ohm, ±5%, ¼W | 2 |
| | R265, 365 | | Carbon, 6.8 K ohm, ±5%, ¼W | 2 |
| | R261, 361 | | Carbon, 18 K ohm, ±5%, ¼W | 2 |
| | R251 | | Metal film, 150 ohm, ±5%, ½W, Fuse | 1 |
| | CAPACITORS | | | |
| | C265, 365 | | Mylar, 0.0047 mfd, ±10%, 50V | 2 |
| | C268, 368 | | Mylar, 0.22 mfd, ±10%, 50V | 2 |
| | C267, 367 | | Mylar, 0.027 mfd, ±10%, 50V | 2 |
| | C266, 366 | | Mylar, 0.047 mfd, ±10%, 50V | 2 |
| | C263, 363 | | Ceramic, 470 pF, ±10%, 50V, YW | 2 |
| | C262, 362 | | Ceramic, 10 pF, ±10%, 50V, SL | 2 |
| | C251 | | Electrolytic 35V/100 mfd | 1 |
| | C264, 364 | | Electrolytic 25V/4.7 mfd | 2 |
| | C261, 361 | | Electrolytic 25V/3.3 mfd Alsicon | 2 |
| | **AMP. P. C. B. ASSEMBLY** | | | |
| 89 | | R-A72801 | Circuit board assembly, Amp. | 1 |
| | SVR211, 311 | R-R110729 | Preset resistor, 5K | 2 |
| | | R-S17024 | Fuse clip | 12 |
| | L201 | R-W1046 | Choke coil, 40 μH | 1 |
| | | R-237050 | Eyelet lug | 1 |
| | | R-2671546 | Heat sink | 1 |
| | SEMICONDUCTORS | | | |
| | D201 | | Diode, S5VB20 | 1 |
| | D207 | | Zener diode, EQB-01-33 | 1 |
| | D205, 206 | | Diode, 10D2 | 2 |
| | Q216, 316, 217, 317, 201 | | Transistor, 2SC1986Y, G | 4 |
| | Q214, 314 | | Transistor, 2SD438 E | 2 |
| | Q215, 315 | | Transistor, 2SB560 E | 2 |
| | Q211, 311 | | Transistor, 2SA702 F | 2 |
| | Q213, 313 | | Transistor, 2SC536 E | 2 |
| | Q212, 312 | | Transistor, 2SD438 E | 2 |
| | Q201 | | Transistor 2SD313VD | 1 |

| Key No. | Ref. No. | Part No. | Description | Q'ty |
|---|---|---|---|---|
| | RESISTORS | | | |
| | R214, 314 | | Carbon, 100 K ohm, ±5%, ¼W | 2 |
| | R211, 311, 225, 325 | | Carbon, 1 K ohm, ±5%, ¼W | 4 |
| | R224, 324 | | Carbon, 10 ohm, ±5%, ¼W | 2 |
| | R220, 320, 221, 321 | | Carbon, 220 ohm, ±5%, ¼W | 4 |
| | R219, 319 | | Carbon, 3.3 K ohm, ±5%, ¼W | 2 |
| | R217, 317 | | Carbon, 820 ohm, ±5%, ¼W | 2 |
| | R212, 312 | | Carbon, 56 K ohm, ±5%, ¼W | 2 |
| | R216, 316 | | Carbon, 8.2 K ohm, ±5%, ¼W | 2 |
| | R213, 313 | | Carbon, 150 K ohm, ±5%, ¼W | 2 |
| | R218, 318 | | Carbon, 2.2 K ohm, ±5%, ¼W | 2 |
| | R226, 326 | | Carbon, 15 K ohm, ±5%, ¼W | 2 |
| | R215, 315 | | Carbon, 180 ohm, ±5%, ¼W | 2 |
| | R201 | | Metal film, 1.5 K ohm, ±5%, 1W Fuse | 1 |
| | R222, 322, 223, 323 | | Cement, 0.47 ohm, ±5%, 5W | 4 |
| | CAPACITORS | | | |
| | C211, 311 | | Mylar, 0.0012 mfd, ±10%, 50V | 2 |
| | C220, 320 | | Mylar, 0.1 mfd, ±20%, 50V | 2 |
| | C209 | | Mylar, 0.047 mfd, ±20%, 200V | 1 |
| | C201, 202, 203, 204, 304, 305 | | Mylar, 0.047 mfd, ±20%, 100V | 6 |
| | C214, 314 | | Ceramic, 0.001 mfd, ±10%, 50V, YW | 2 |
| | C215, 315, 217, 317 | | Ceramic, 100 pF, ±10%, 50V, SL | 4 |
| | C208, 302 | | Ceramic, 0.04 mfd, +80 −20%, 50V, FZ | 2 |
| | C219, 319 | | Electrolytic 40V/2200 mfd | 2 |
| | C216, 316 | | Electrolytic 35V/220 mfd | 2 |
| | C213, 313, 207 | | Electrolytic 35V/100 mfd | 3 |
| | C221, 321 | | Electrolytic 35V/10 mfd | 2 |
| | C218, 318 | | Electrolytic 25V/220 mfd | 2 |
| | C212, 312 | | Electrolytic 50V/3.3 mfd | 2 |
| | C205 | | Electrolytic 63V/3300 mfd | 1 |
| | C303 | | Electrolytic 25V/2200 mfd | 1 |
| | C206 | | Electrolytic 35V/1000 mfd | 1 |
| | C301 | | Electrolytic 63V/100 mfd | 1 |
| | **LAMP P. C. B. ASSEMBLY** | | | |
| 90 | | R-A72411 | Circuit board assembly, Lamp | 1 |
| | PL 1, 2, 3, 4, 5, 6 | R-S17205 | Pilot lamp, 12V 110 mA, Dial | 6 |
| | **CASSETTE AMP. P. C. B.** | | | |
| 91 | | R-A72412 | Circuit board assembly, Cassette Amp. | 1 |
| | L401, 501 | R-W1777 | Bias trap coil | 2 |
| | L402, 502, 403, 503, 404, 504 | R-W6724 | Coil, 10 mH | 6 |
| | SVR401, 501, 402, 502, 403, 503 | R-R110724 | Preset resistor, 10K | 6 |
| | | R-S17152 | Filter | 2 |
| | | R-S27207-3 | Plug, 3P, CP-15, 16 | 2 |
| | | R-S27206-5 | Plug, 5P, CP-17 | 1 |
| | S401 | R-S47282 | Slide switch | 1 |
| | | R-S37158 | P. C joinner | 1 |
| | | R-S27207-6 | Plug, 6P, CP-24 | 1 |
| | SEMICONDUCTORS | | | |
| | IC401, 501 | | Integrated circuit, TA7120P | 2 |
| | IC402, 502 | | Integrated circuit, NE545 B | 2 |
| | Q401, 501, 402, 502, 403, 503 | | Transistor, 2SC536 E | 6 |
| | D401, 501, 402, 502 | | Diode, IS188 AM | 4 |
| | RESISTORS | | | |
| | R412, 512 | | Carbon, 150 K ohm, ±5%, ¼W | 2 |
| | R411, 511 | | Carbon, 10 ohm, ±5%, ¼W | 2 |
| | R416, 516 | | Carbon, 4.7 K ohm, ±5%, ¼W | 2 |
| | R415, 515 | | Carbon, 56 K ohm, ±5%, ¼W | 2 |
| | R413, 513, 405 | | Carbon, 3.3 K ohm, ±5%, ¼W | 3 |
| | R414, 514 | | Carbon, 4.7 K ohm, ±5%, ¼W | 2 |
| | R404 | | Carbon, 1 K ohm, ±5%, ¼W | 1 |

NOTES : 1. Part orders must contain Model Number, Part Number and Description.
2. Ordering quantity of screws and/or resistors must be multiple of 10 pcs.

# PARTS LIST

| Key No. | Ref. No. | Part No. | Description | Q'ty |
|---|---|---|---|---|
| | R406, 425, 525 | | Carbon, 10 K ohm, ±5%, ¼W | 3 |
| | R407 | | Carbon, 1.5 K ohm, ±5%, ¼W | 1 |
| | R417, 517 | | Carbon, 180 ohm, ±5%, ¼W | 2 |
| | R418, 518 | | Carbon, 47 K ohm, ±5%, ¼W | 2 |
| | R422, 522 | | Carbon, 270 K okm, ±5%, ¼W | 2 |
| | R423, 523 | | Carbon, 150 K ohm, ±5%, ¼W | 2 |
| | R424, 524 | | Carbon, 680 K ohm, ±5%, ¼W | 2 |
| | R421, 521 | | Carbon, 100 K ohm, ±5%, ¼W | 2 |
| | R420, 520 | | Carbon, 120 ohm, ±5%, ¼W | 2 |
| | R426, 526 | | Carbon, 18 K ohm, ±5%, ¼W | 2 |
| | R428, 528 | | Carbon, 330 K ohm, ±5%, ¼W | 2 |
| | R427, 527 | | Carbon, 39 K ohm, ±5%, ¼W | 2 |
| | R429, 529 | | Carbon, 5.6 K ohm, ±5%, ¼W | 2 |
| | R431, 531 | | Carbon, 680 ohm, ±5%, ¼W | 2 |
| | R433, 533 | | Carbon, 820 ohm, ±5%, ¼W | 2 |
| | R435, 535 | | Carbon, 150 K ohm, ±5%, ¼W | 2 |
| | R432, 532 | | Carbon, 100 ohm, ±5%, ¼W | 2 |
| | R430, 530 | | Carbon, 27 K ohm, ±5%, ¼W | 2 |
| | R436, 536 | | Carbon, 6.8 K ohm, ±5%, ¼W | 2 |
| | R437, 537 | | Carbon, 3.3 K ohm, ±5%, ¼W | 2 |
| | R438, 538 | | Carbon, 82 ohm, ±5%, ¼W | 2 |
| | R439, 539 | | Carbon, 3.9 K ohm, ±5%, ¼W | 2 |
| | R441, 541 | | Carbon, 1.2 K ohm, ±5%, ¼W | 2 |
| | R442, 542 | | Carbon, 8.2 K ohm, ±5%, ¼W | 2 |
| | R419, 519 | | Metal film, 3.3 K ohm, ±1%, ⅛W | 2 |
| | R401 | | Metal oxide film, 360 ohm, ±5%, 3W | 1 |
| | R402, 403 | | Metal oxide film, 220 ohm, ±5%, 1W | 2 |
| | CAPACITORS | | | |
| | C420, 520 | | Mylar, 0.0056 mfd, 50V | 2 |
| | C414, 514 | | Mylar, 0.015 mfd, ±5%, 50V | 2 |
| | C423, 523 | | Mylar, 0.0047 mfd, ±5%, 50V | 2 |
| | C422, 522 | | Mylar, 0.027 mfd, ±5%, 50V | 2 |
| | C426, 526 | | Mylar, 0.047 mfd, ±5%, 50V | 2 |
| | C442, 542 | | Mylar, 0.027 mfd, ±5%, 50V | 2 |
| | C441, 541 | | Mylar, 0.0082 mfd, ±5%, 50V | 2 |
| | C439, 539 | | Mylar, 0.039 mfd, ±5%, 50V | 2 |
| | C438, 538 | | Mylar, 0.01 mfd, ±5%, 50V | 2 |
| | C436, 536 | | Mylar, 0.015 mfd, ±5%, 50V | 2 |
| | C435, 535 | | Mylar, 0.001 mfd, ±5%, 50V | 2 |
| | C431, 531 | | Mylar, 0.1 mfd, | 2 |
| | C446, 546 | | Ceramic, 470 pF, ±10%, 50V, YW | 2 |
| | C417, 517 | | Ceramic, 30 pF, ±10%, 50V, SL | 2 |
| | C445, 545 | | Ceramic, 20 pF, ±10%, 50V, SL | 2 |
| | C413, 513 | | Styrol, 1000 pF, ±5%, 50V | 2 |
| | C411, 511 | | Styrol, 160 pF, ±5%, 50V | 2 |
| | C412, 512 | | Electrolytic 10V/3.3 mfd, Tantalum | 2 |
| | C418, 518 | | Electrolytic 16V/33 mfd | 2 |
| | C415, 515 | | Electrolytic 6.3V/220 mfd | 2 |
| | C402, 403 | | Electrolytic 16V/220 mfd | 2 |
| | C416, 516, 421, 521, 425, 525 | | Electrolytic 16V/10 mfd | 6 |
| | C419, 519 | | Electrolytic 25V/1 mfd Alsicon | 2 |
| | C429, 529 | | Electrolytic 25V/0.33 mfd Alsicon | 2 |
| | C430, 530 | | Electrolytic 25V/0.1 mfd Alsicon | 2 |
| | C401 | | Electrolytic 25V/220 mfd | 1 |
| | C404 | | Electrolytic 16V/100 mfd | 1 |
| | C432, 532, 443, 543 | | Electrolytic 25V/1 mfd | 4 |
| | C434, 534 | | Electrolytic 25V/3.3 mfd Alsicon | 2 |
| | C437, 537 | | Electrolytic 10V/3.3 mfd Alsicon ±10% | 2 |
| | C427, 527, 428, 528, 444, 544 | | Electrolytic 16V/10 mfd | 6 |
| | C424, 524 | | Electrolytic 10V/220 mfd | 2 |
| **CASSETTE SW P. C. B. ASSEMBLY** | | | | |
| 92 | | R-A72800 | Circuit board assembly, Cassette SW | 1 |
| | | R-W8737 | Coil | 1 |

| Key No. | Ref. No. | Part No. | Description | Q'ty |
|---|---|---|---|---|
| | VR401, 501 | R-R145730 | Variable resistor, 5K-A | 2 |
| | SVR551, 552 | R-RT10723 | Preset resistor, 100K-B | 2 |
| | S402, 404 | R-S47349 | Push switch, Bias, Dolby | 2 |
| | S405 | R-S47146 | Push switch, Beat cut | 1 |
| | S403 | R-S47350 | Push switch, EQ | 1 |
| | | R-S27271-5 | Plug, 5P, CP-18 | 1 |
| | | R-1270596 | Metal plate, Rec Vol earth | 1 |
| | | | Screw, Flat Hd., 3x4 | 2 |
| | SEMICONDUCTORS | | | |
| | Q451, 452 | | Transistor, 2SC1317 R | 2 |
| | RESISTORS | | | |
| | R457 | | Carbon, 5.6 K ohm, ±5%, ¼W | 1 |
| | R456 | | Carbon, 3.3 K ohm, ±5%, ¼W | 1 |
| | R451, 452, 453 | | Carbon, 820 ohm, ±5%, ¼W | 3 |
| | R455 | | Solid, 33 ohm, ±10%, ½W | 1 |
| | R458 | | Metal oxide film, 220 ohm, ±5%, 1W | 1 |
| | CAPACITORS | | | |
| | C453, 454 | | Mylar, 0.001 mfd, ±10%, 50V | 2 |
| | C457, 458 | | Mylar, 0.01 mfd, ±10%, 50V | 2 |
| | C455 | | Mylar, 0.0022 mfd, ±5%, 100V | 1 |
| | C456, 459 | | Ceramic, 120 pF, ±10%, 50V, YW | 2 |
| | C452 | | Styrol, 330 pF, ±5%, 125V | 1 |
| | C451 | | Electrolytic 16V/330 mfd | 1 |
| **AUTO STOP P. C. B. ASSEMBLY** | | | | |
| 93 | | R-A72414 | Circuit board assembly | 1 |
| | S407 | R-S17038 | Lead switch | 1 |
| | SEMICONDUCTORS | | | |
| | Q551 | | Transistor, 2SA702 F | 1 |
| | Q552 | | Transistor, 2SC1317 R | 1 |
| | D551, 552 | | Diode, IS1588 T | 2 |
| | D553 | | Diode, 10D1 | 1 |
| | RESISTORS | | | |
| | R552 | | Carbon, 2.7 K ohm, ±5%, ¼W | 1 |
| | R553 | | Carbon, 56 K ohm, ±5%, ¼W | 1 |
| | R551 | | Carbon, 100 ohm, ±5%, ¼W | 1 |
| | R554 | | Carbon, 680 ohm, ±5%, ¼W | 1 |
| | R555 | | Carbon, 1 K ohm, ±5%, ¼W | 1 |
| | R556 | | Metal film, 10 ohm, ±5%, ½W Fuse | 1 |
| | R557 | | Metal oxide film, 150 ohm, ±±5%, 2W | 1 |
| | CAPACITOR | | | |
| | C551 | | Electrolytic 10V/100 mfd | 1 |
| | C552 | | Electrolytic 16V/47 mfd | 1 |
| | C553 | | Electrolytic 25V/22 mfd | 1 |
| | C554 | | Electrolytic 16V/10 mfd | 1 |
| | C555 | | Ceramic 220p ±10%, 50V YW | 1 |
| **CASSETTE LAMP P. C. B. ASSEMBLY** | | | | |
| 94 | | R-A72810 | Circuit board assembly, Cassette lamp | 1 |
| | PL401, 402 | R-S17205 | Lamp | 2 |

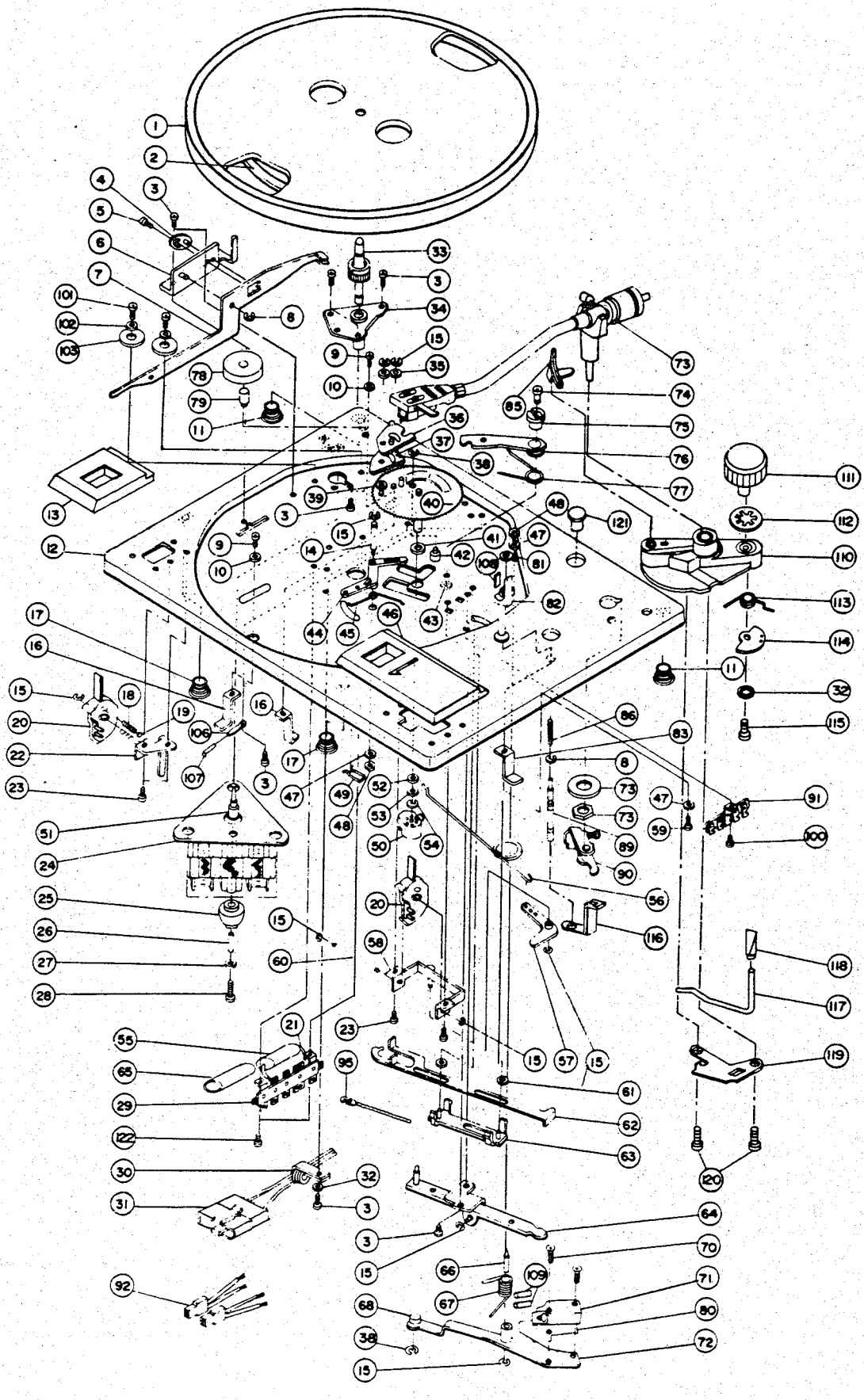
NOTES : 1. Part orders must contain Model Number, Part Number and Description.
2. Ordering quantity of screws and/or resistors must be multiple of 10 pcs.

# PARTS LIST (PLAYER MECHANISM)

| Key No. | Ref. No. | Part No. | Description | Q'ty |
|---|---|---|---|---|
| **PLAYER MECHANISM (R-S57149)** | | | | |
| 1 | | 620016-1 | Turn-table | 1 |
| 2 | | 700515-2 | Belt | 1 |
| 3 | | | Tap. Screw, Pan Hd., 3x8 | 8 |
| 4 | | 893040 | Eccentricity pin, Base speed change | 1 |
| 5 | | | Screw, Pan Hd., 3x6 | 1 |
| 6 | | 893046 | Base, Speed change | 1 |
| 7 | | 870402 | Arm, Speed change | 1 |
| 8 | | | E-ring, 3 | 2 |
| 9 | | | Screw, Pan Hd., 4x10 | 2 |
| 10 | | | Nylon washer, 4x10x1t | 2 |
| 11 | | 890166-3 | Spring | 2 |
| 12 | | 851269 | Unit plate | 1 |
| 13 | | 895928 | SP cover | 1 |
| 14 | | 890322 | Reject lever shaft | 1 |
| 15 | | | E-ring, 3.2 | 9 |
| 16 | | 890197 | Stopper | 2 |
| 17 | | 890166-1 | Spring | 2 |
| 18 | | E-287680 | Spring, Cam speed change | 1 |
| 19 | | | Steel ball, 4 $\phi$ | 1 |
| 20 | | 893605-1 | Cam, Speed change | 2 |
| 21 | | 890542-0 | UL tube, 1 $\phi$x20L | 2 |
| 22 | | 893604 | Base, Cam speed change | 1 |
| 23 | | | Tap. Screw, Pan Hd., 3x6 | 4 |
| 24 | | 631200 | Phono motor assembly | 1 |
| 25 | | 702230 | Rubber cushion | 3 |
| 26 | | 893659-1 | Pipe | 3 |
| 27 | | | Washer, Flat, 3.2x10x0.8t | 3 |
| 28 | | | Tap. Screw, Bind Hd., 3x20 | 3 |
| 29 | | 895466 | Terminal | 1 |
| 30 | | 890593 | Clamper, Cord | 1 |
| 31 | | 894421 | A.C. cord assembly, CP-22 | 1 |
| 32 | | | Washer, Flat, 3.2x8x0.5t | 2 |
| 33 | | 701205 | Shaft, Turn-table | 1 |
| 34 | | 700514-1 | Shat bracket assembly, Turn-table | 1 |
| 35 | | 890746 | Washer, Clutch | 2 |
| 36 | | 890273 | Clutch plate | 1 |
| 37 | | 890200 | Clutch guide | 1 |
| 38 | | E-813152 | E-ring | 2 |
| 39 | | 890747 | Washer, Clutch guide | 1 |
| 40 | | 891210 | R gear assembly | 1 |
| 41 | | | Fiber washer, 5x10x0.5t | 1 |
| 42 | | E-817790 | Eccentricity pin, R gear | 1 |
| 43 | | E-813153 | E-ring | 1 |
| 44 | | 890218 | Kick lever | 1 |
| 45 | | 890259 | Torsion spring | 1 |
| 46 | | 895929 | Reject cover | 1 |
| 47 | | | Washer, Spring, 3 | 3 |
| 48 | | | Nut, Hex Hd., 3 | 2 |
| 49 | | E-271110 | Stopper, Turn-table shaft | 1 |
| 50 | | 890721 | Switch lever assembly | 1 |
| 51 | | 703262-2 | Pulley | 1 |
| 52 | | | Fiber washer, 5x10x0.3t | 1 |
| 53 | | | Fiber washer, 5x10x1t | 1 |
| 54 | | | E-ring, 4 | 1 |
| 55 | | 893335 | Oil condencer ECN-C4A 0.047 mfd | 1 |
| 56 | | 890379-2 | Reject spring | 1 |
| 57 | | 891980 | Reject link | 1 |
| 58 | | 893611 | Reject base assembly | 1 |
| 59 | | | Screw, Pan Hd., 3x30 | 1 |
| 60 | | 893612 | Shaft, Cam speed change | 1 |
| 61 | | 890765 | Washer, Arm return | 2 |
| 62 | | 891635-1 | Arm return assembly | 1 |
| 63 | | 870038-1 | Base, Arm return | 1 |
| 64 | | 890794 | Seesaw arm assembly | 1 |
| 65 | | 890835 | UL tube, 16 $\phi$x40L | 1 |
| 66 | | 890322-2 | Shaft, Reject lever | 1 |
| 67 | | 892331 | Arm spring | 1 |
| 68 | | 890995 | Eccentricity pin | 1 |
| 70 | | | Screw, Pan Hd., 3x16 Nylon | 2 |
| 71 | | 870560 | Micro switch | 1 |
| 72 | | 890994 | Arm, switch | 1 |
| 73 | | R-S07269 | Pick-up assembly | 1 |
| 74 | | 890620 | Gear stop stud | 1 |
| 75 | | 890619 | Eccentricity mounting | 1 |
| 76 | | 890618 | Gear stop arm | 1 |
| 77 | | 890628 | Gear stop spring | 1 |
| 78 | | 890876 | Adaptor | 1 |
| 79 | | 890675 | Shaft, Adaptor | 1 |
| 80 | | 893327 | Insulation sheet | 1 |
| 81 | | | CS-ring, 3.5 | 1 |
| 82 | | 893369 | Rest clip assembly, Pick-up | 1 |
| 83 | | 893854-1 | Stopper, Rest clip | 1 |
| 85 | | 895988 | Elevation plate | 1 |
| 86 | | E-832780 | Elevation spring | 1 |
| 89 | | 895930 | Elevation shaft | 1 |
| 90 | | 893583 | Arm, Pick-up table | 1 |
| 91 | | D-10002-51 | 5P lug plate | 1 |
| 92 | | 703846-5 | Connector assembly | 2 |
| 95 | | | Band | 1 |
| 100 | | | Tap. Screw, Pan Hd., 3.5x8 | 1 |
| 101 | | 893062-1 | Screw | 2 |
| 102 | | | Fiber washer, 4x12x0.5t | 2 |
| 103 | | 893407 | Caution label | 2 |
| 106 | | 890755 | Lug | 1 |
| 107 | | | UL tube, 3 $\phi$x50L | 1 |
| 108 | | 891913-2 | Sheet | 1 |
| 109 | | 702233-3 | Tube 3.7 $\phi$x15 | 2 |
| 110 | | 851270 | Base pick-up | 1 |
| 111 | | 895956 | IFC knob assembly | 1 |
| 112 | | E-404181 | Metal spring | 1 |
| 113 | | 895674-1 | IFC spring | 1 |
| 114 | | 895932 | IFC cam | 1 |
| 115 | | | Tap screw pan Hd 3x6 | 1 |
| 116 | | 895676 | Cue arm | 1 |
| 117 | | 895677 | Cue lever | 1 |
| 118 | | 893914 | Cue cap | 1 |
| 119 | | 895933 | Plate pick-up base | 1 |
| 120 | | | Tap. Screw, pan Hd., 2x4 | 2 |
| 121 | | 891258 | Cap | 1 |
| 122 | | | Screw, pan HD., 3x8 | 2 |
| | | R-S07270 | Head shell assembly | 1 |
| | | R-S07149 | Cartridge assembly | 1 |
| | | R-S07163 | Stylus, DIA | 1 |
| | | R-S4470024 | Turn table cover | 1 |
| | | R-4772550 | Label geer | 1 |
| | | R-4771783 | Label 50Hz | 1 |

NOTES : 1. Part orders must contain Model Number, Part Number and Description.
2. Ordering quantity of screws and/or resistors must be multiple of 10 pcs.

# EXPLODED VIEW (PLAYER MECHANISM)



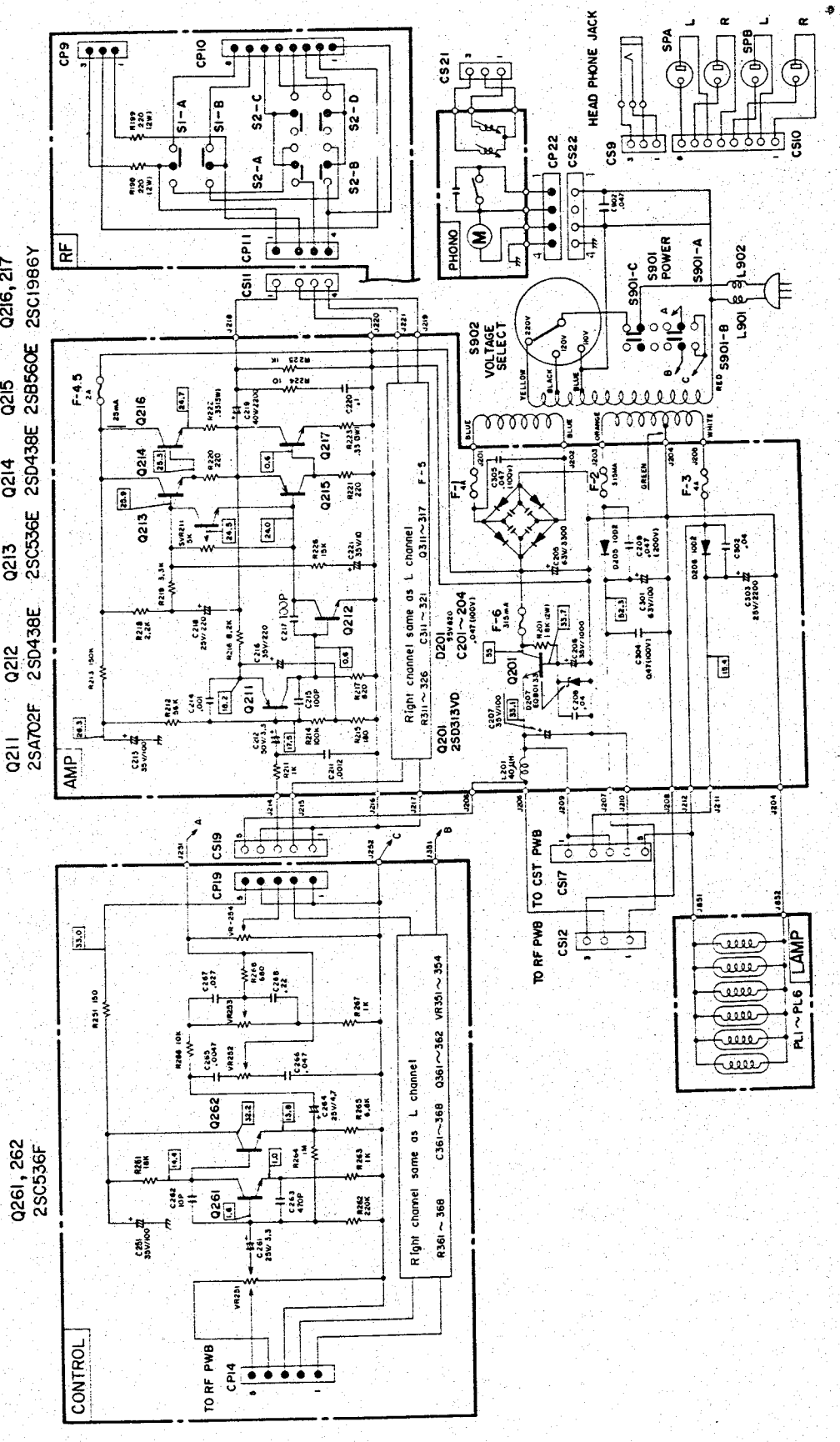
# PARTS LIST (CASSETTE MECHANISM)

| Key No. | Ref. No. | Part No. | Description | Q'ty |
|---|---|---|---|---|
| 1 | | 268 05 03 | Sub lever, REC | 1 |
| 2 | | 48 04 08 | Spring, Head | 1 |
| 3 | | 408 04 13 | Spring, Head panel | 2 |
| 4 | | 408 04 05 | Spring, RQ | 1 |
| 5 | | 715 07 81 | Pinch rollar assembly | 1 |
| 6 | | 03 06 01 | Spacer, Idler | 1 |
| 7 | | 408 07 92 | Cluth arm assembly | 1 |
| 8 | | 408 07 04 | Plate, Clutch | 1 |
| 9 | | 408 07 05 | Pulley, Clutch | 1 |
| 10 | | 02 05 02 | Shaft, Clutch | 1 |
| 11 | | 408 07 06 | Bracket, Clutch spring | 1 |
| 12 | | 02 05 06 | Stopper, Clutch spring | 1 |
| 13 | | 03 06 03 | Washer, Clutch shaft stop | 1 |
| 14 | | 238 04 06 | Spring, Clutch arm | 1 |
| 15 | | 58 05 03 | Felt, Clutch | 1 |
| 17 | | 58 13 16 | Spring, FF arm | 1 |
| 18 | | 408 08 04 | Plate, FF | 1 |
| 19 | | 408 08 10 | Spring, Plate FF | 1 |
| 20 | | 408 08 15 | Plate, Rewind | 1 |
| 21 | | 408 08 10 | Spring, Plate rewind | 1 |
| 22 | | 11 05 05 | Nylon washer | 1 |
| 23 | | 408 09 01 | Brake arm | 1 |
| 24 | | 408 09 02 | Spring, Brake arm | 1 |
| 25 | | 408 09 03 | Plate, Brake arm | 1 |
| 26 | | 408 10 81 | Rewind idler arm | 1 |
| 27 | | 211 09 02 | Rewind idler | 1 |
| 28 | | 02 9 05B | Spring, Rewind idler arm | 1 |
| 29 | | 58 09 03 | Flywheel capstan | 1 |
| 30 | | 06 04 05 | Spring, Plate flywheel | 1 |
| 31 | | 408 11 95 | Plate, Flywheel | 1 |
| 32 | | 408 14 05 | Auto lever | 1 |
| 33 | | 998 14 01 | Spacer, Auto lever | 1 |
| 36 | | | Screw, Pan Hd. with Washer, M2x5 | 6 |
| 37 | | | Screw, Pan Hd. +, −, M2x6 | 1 |
| 38 | | | Screw, Pan Hd. with Washer, M2.6x4 | 3 |
| 39 | | | Screw, Bind Hd., M2.6x4 | 1 |
| 40 | | | Screw, Pan Hd., M2.6x10 | 1 |
| 41 | | | E Ring, 1.2 | 2 |
| 42 | | | E Ring, 1.5 | 4 |
| 43 | | | E Ring, 1.9 | 1 |
| 44 | | | E Ring, 2.0 | 2 |
| 45 | | | E Ring, 2.5 | 1 |
| 46 | | | E Ring, 3.2 | 1 |
| 47 | | | E Ring, 4.0 | 2 |
| 50 | | 706 15 01 | Washer, Plane, M2.6 | 1 |
| 51 | | | Washer, Plane, 2.3x4.3x0.4t | 1 |
| 52 | | | Washer, Plane, 7x2.2x0.25t | 2 |
| 53 | | 03 15 03 | F Washer | 1 |
| 58 | | 542 01 81 | Chassis assembly | 1 |
| 60 | | 1065 02 91 | Bracket assembly, Button | 1 |
| 65 | | 542 03 01 | Slide lever, REC | 1 |
| 66 | | 09 03 02 | Spacer, Slide lever REC | 1 |
| 67 | | 132 03 03 | Spring, Sub lever REC | 1 |
| 68 | | 268 05 15 | Stopper, Sub lever REC | 1 |
| 70 | | 713 04 81 | Panel, Head | 1 |
| 71 | | 668 05 01 | Spring, Pinch roller | 1 |
| 72 | | 79 05 01 | Spacer, REC/PLAY head | 1 |
| 73 | | 463 04 02 | Spacer, Erase head | 2 |
| 74 | | 408 04 11 | Spacer, Panel head | 1 |
| 75 | | 542 04 08 | Slide lever, PLAY | 1 |
| 76 | | 09 03 02 | Spacer, Slide lever PLAY | 4 |
| 77 | | 572 06 95 | Reel plate assembly | 2 |
| 78 | | 04 05 08 | Spring, Back tension | 1 |
| 79 | | 542 07 01 | Spring, Clutch | 1 |
| 82 | | 408 08 91 | FF arm assembly | 1 |
| 83 | | 668 08 10 | FF idler | 1 |
| 84 | | 668 08 02 | RF idler | 1 |
| 85 | | 668 08 03 | Plate, Clutch RF | 1 |
| 86 | | 668 08 05 | Bracket, Spring clutch RF | 1 |
| 87 | | 668 08 06 | Stopper, Spring clutch RF | 1 |
| 88 | | 668 08 07 | Spring, Clutch RF | 1 |
| 89 | | 668 08 08 | Shaft, RF | 1 |
| 90 | | 668 08 09 | Washer, Clutch | 1 |
| 91 | | 369 07 01 | Bush capstan | 1 |

| Key No. | Ref. No. | Part No. | Description | Q'ty |
|---|---|---|---|---|
| 92 | | 446 07 01 | Earth plate | 1 |
| 95 | | 408 12 01 | Bracket, Motor | 1 |
| 96 | | 624 12 01 | Square driving belt | 1 |
| 97 | | 750 12 10 | Spacer, Motor | 2 |
| 98 | | 588 09 10 | Rubber cushion, Motor | 4 |
| 99 | | 446 11 02 | Cushion | 1 |
| 100 | | 716 12 01 | Pulley, Motor | 1 |
| 101 | | 542 13 03 | Stopper, EJECT | 1 |
| 102 | | 268 12 01 | Spring, Stopper EJECT | 1 |
| 103 | | 542 13 01 | Slide lever, EJECT | 1 |
| 105 | | 238 03 12 | Spring, Slide lever EJECT | 1 |
| 106 | | 542 13 01 | Bracket, Slide lever EJECT | 1 |
| 109 | | 668 14 81 | Plunger | 1 |
| 110 | | 668 14 82 | D. C. solenoid | 1 |
| 111 | | 668 14 08 | Bracket, D. C. solenoid | 1 |
| 112 | | 02 07 08 | Spring, Auto lever | 1 |
| 115 | | 408 15 81 | Slide lever assembly | 1 |
| 116 | | 408 15 10 | Spring, Slide lever assembly | 1 |
| 117 | | 408 15 03 | Arm lever | 1 |
| 118 | | 238 13 04 | Spacer, Arm lever | 1 |
| 121 | | 630 14 01 | Short switch | 1 |
| 122 | | 1065 20 01 | Switch, Muting | 1 |
| 123 | | 998 20 01 | Bracket, Switch muting | 1 |
| 124 | | 973 14 01 | Switch, Pause | 2 |
| 125 | | | Plate, Button select | 1 |
| 127 | | 542 18 81 | Slide lever assembly, Pause | 1 |
| 128 | | 542 18 01 | Lever, Pause | 1 |
| 129 | | 542 18 03 | Spring, Lever pause | 1 |
| 131 | | | Screw, Bind Hd., M2.6x6 | 3 |
| 132 | | | Screw, Pan Hd., M2x3 | 2 |
| 133 | | | Screw, Pan Hd., M2x5 | |
| 134 | | | Screw, Pan Hd., M2x10 | 1 |
| 135 | | | Screw, Pan Hd. with Washer, M3x5 | 2 |
| 136 | | | Screw, Pan Hd. with Washer, M2.6x5 | 4 |
| 137 | | | Screw, Pan Hd. with Washer, M2x5 | 1 |
| 139 | | | Screw, Pan Hd. with Washer, M2.6x8 | 3 |
| 140 | | | Screw, Pan Hd., M2.6x8 | 2 |
| 141 | | | Screw, Pan Hd., M2x10 | 2 |
| 142 | | | Screw, Pan Hd. C-tight, M2.6x4 | 3 |
| 143 | | | Washer, Plane, 2.3x6x0.4t | |
| 144 | | 03 13 07 | Cord clamper | 1 |
| 147 | | R-S57108 | Motor | 1 |
| 148 | | R-S07253 | REC/PLAY head | 1 |
| 149 | | R-S07218 | Erase head | 1 |
| 150 | | 1065 16 91 | Counter | 1 |
| 151 | | 297 13 01 | Belt, Counter | 1 |
| 152 | | | Screw, Pan Hd. with Washer, M3x4 Counter | 2 |
| 153 | | R-A72416 | Case assembly, Cassette | 1 |
| | | R-3971456a | Case | (1) |
| | | R-4771987 | Label | (1) |
| 154 | | R-157800 | Plate spring, Cassette push out | 1 |
| 155 | | | Screw, Pan Hd., M2x6 | 1 |
| 156 | | | Washer, Spring, 2 | 1 |
| 157 | | | Nut, Hex Hd., 2 | 1 |
| 158 | | R-157799 | Spring, Cassette case | 1 |
| 159 | | R-S871167 | Metal bracket, Mechanism left | 1 |
| 160 | | | Screw, Oval Hd. tap. M3x6 | 3 |
| 161 | | R-1170998 | Lever, REC | 1 |
| 162 | | R-147046 | Special screw, Lever REC | 2 |
| 163 | | R-157801 | Plate spring, Lever REC | 1 |
| 164 | | | Screw, Pan Hd. with Washer, M3x4 | 1 |
| 165 | | R-S871168 | Metal bracket, Mechanism right | 1 |
| 166 | | | Screw, Oval Hd. tap. M3x6 | 3 |
| 167 | | R-1171000 | Lever, EJECT | 1 |
| 168 | | R-1171001 | Lock lever | 1 |
| 169 | | R-157334 | Spacer | 2 |
| 170 | | | Screw, Pan Hd. with Washer, M3x10 | 1 |
| 171 | | | Nut, Hex Hd., M3 | 1 |
| 172 | | R-157611 | Spring, Lock lever | 1 |
| 173 | | R-1171004 | Metal bracket, Counter | 1 |
| 174 | | | Screw, Pan Hd. Tap. Tight, M2.6x4 | 2 |
| 175 | | R-3971931 | Knob | 7 |

NOTES : 1. Part orders must contain Model Number, Part Number and Description.
2. Ordering quantity of screws and/or resistors must be multiple of 10 pcs.

# SCHEMATIC DIAGRAM




NOTES 1. ALL RESISTANCES ARE 1/4W UNLESS NOTED OTHERWISE VALUES ARE IN OHMS (K=$10^3$, M=$10^6$)

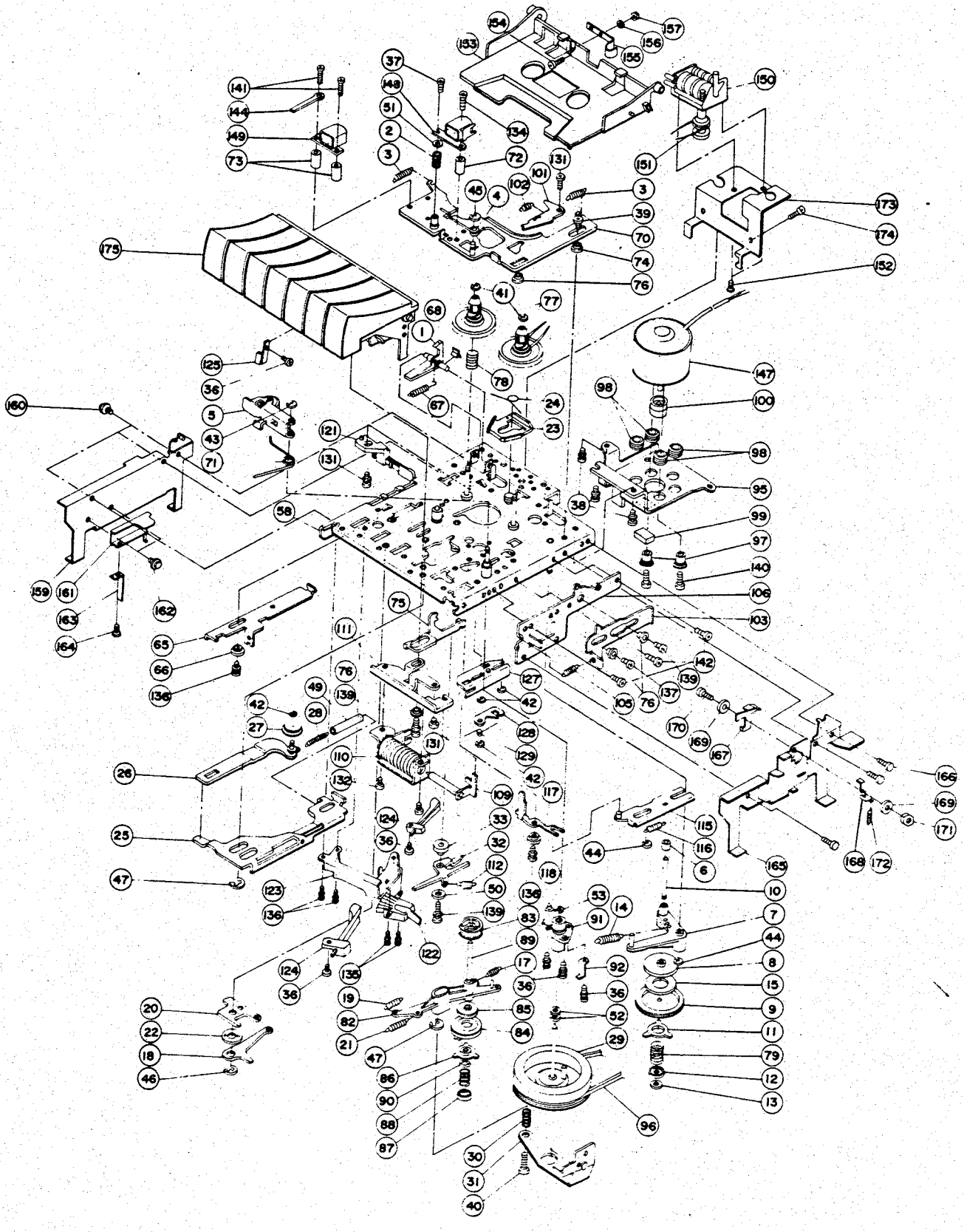
2. ALL CAPACITOR VALUES ARE IN μF (p=$10^{-6}$μF)

3. VOLTAGE READINGS TO COMMON GROUND ARE MEASURED WITH V T V M UNDER NO SIGNAL

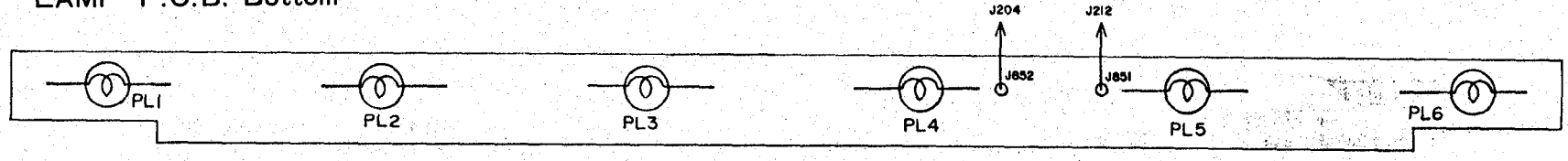
4. THIS SCHEMATIC DIAGRAM MIGHT BE MODIFIED WITH DEVELOPMENT OF TECHNOLOGY

S901. POWER SWITCH (ON)
S902. VOLTAGE SELECT (220V)

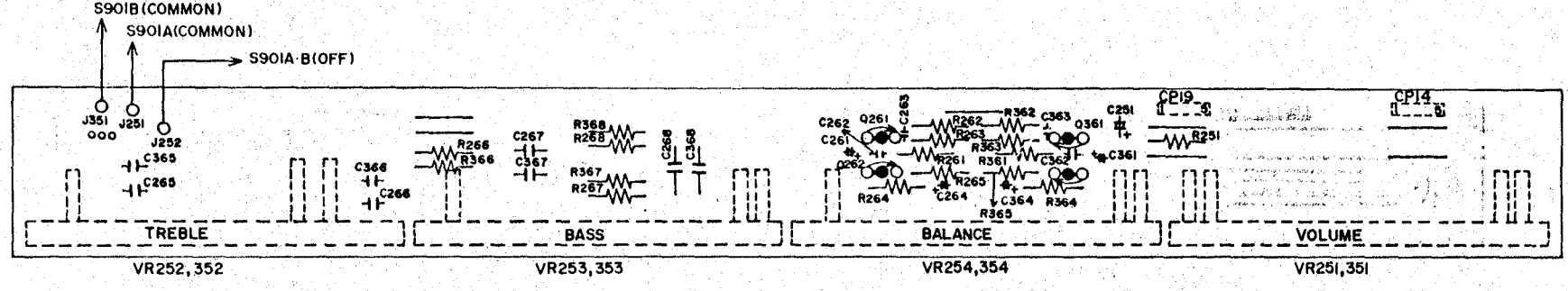
# EXPLODED VIEW (CASSETTE MECHANISM)



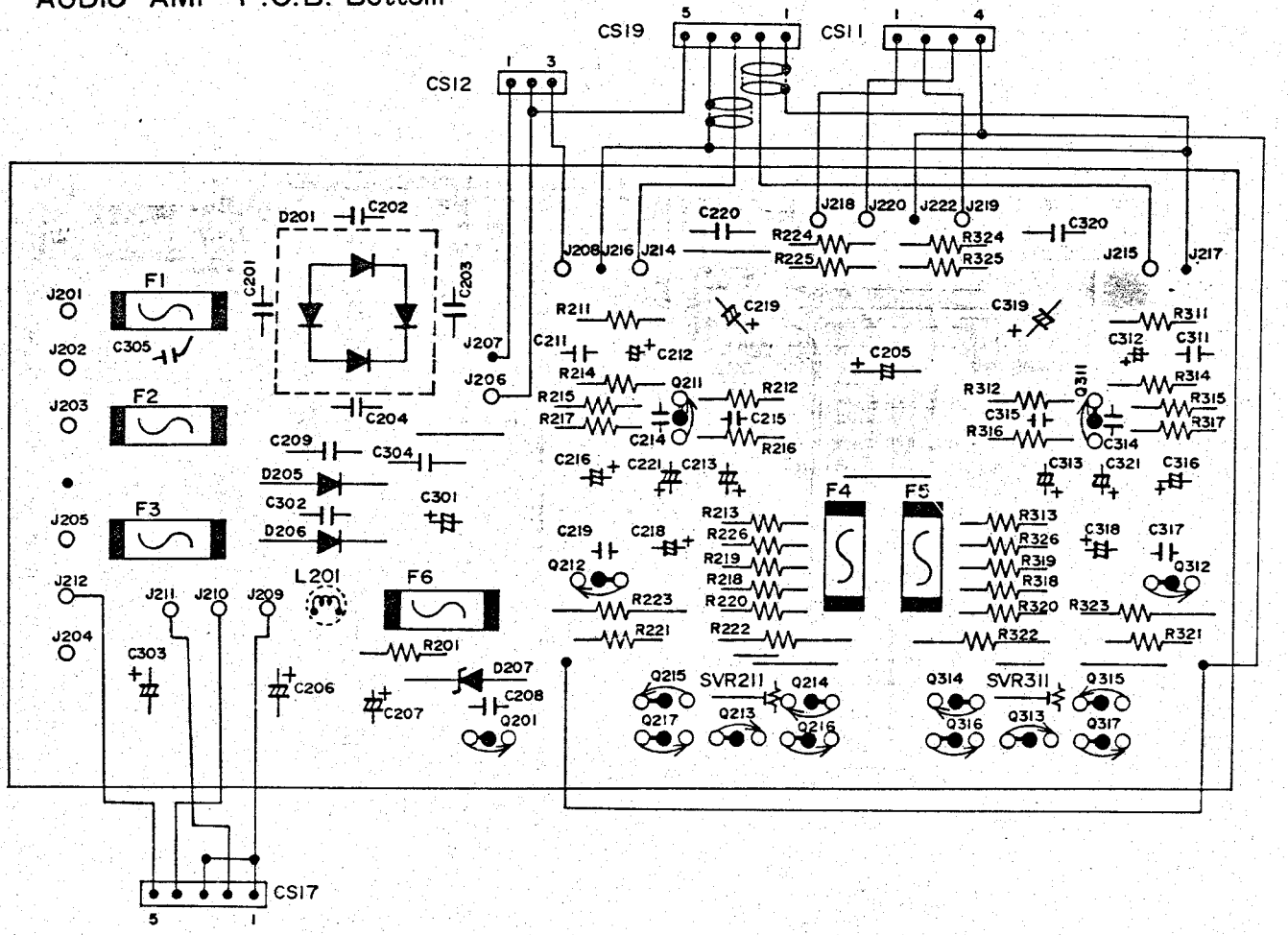
## LAMP P.C.B. Bottom



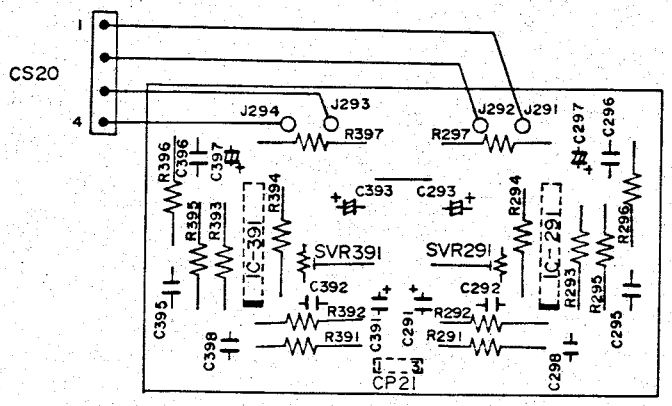

## TONE CONTROL P.C.B. Bottom



## AUDIO AMP P.C.B. Bottom

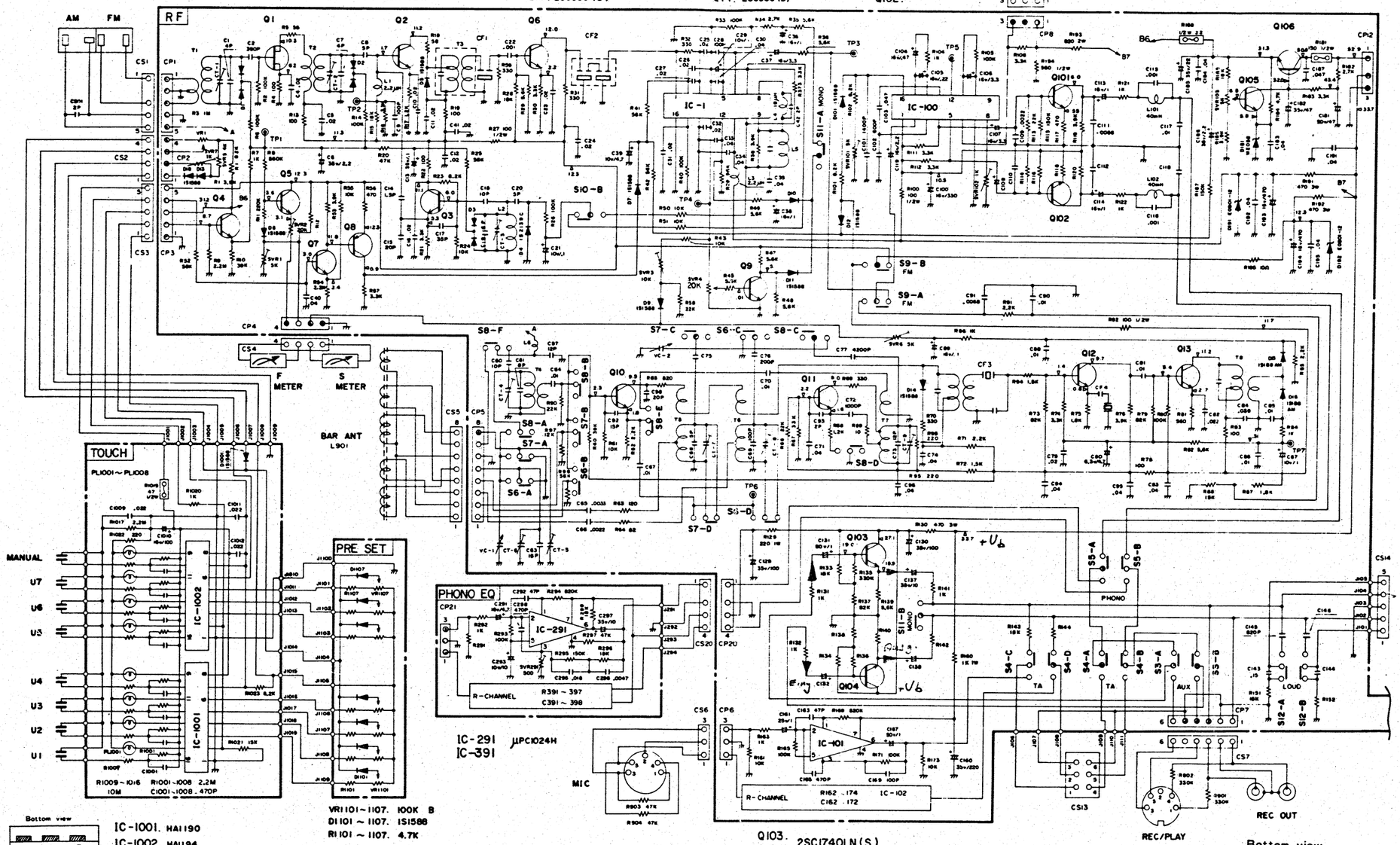



## PHONO EQUALIZER P.C.B. Bottom



# SCHEMATIC DIAGRAM

Q1. JF1033 D1, 2, 3 Q2. 2SC668 (D,E) Q3. 2SC930 (D) IC-1. LA1230 IC-100. LA3350 PL101 FM STEREO Q105. 2SC536 (F)
Q4. 2SC1318 (R) ISV55 Q7. 2SC536 (E) Q6. 2SC930 (D,E) Q9. 2SC536 (F) Q101. 2SC536 (F) Q106. 2SD438 (E)
Q5. 2SC536 (E) Q8. 2SA702 (F) Q10. 2SC930 (D) Q11. 2SC930 (D) Q102.




R1009 ~ 1016 10M R1001 ~ 1008 2.2M C1001 ~ 1008 .470P

VR1101 ~ 1107. 100K B
D1101 ~ 1107. 1S1588
R1101 ~ 1107. 4.7K

Bottom view
B C E
2S031

IC-1001. HA1190
IC-1002. HA1194

IC-291 μPC1024H
IC-391

Q103. Q104. 2SC1740LN(S)

IC-101. μPC1023H
IC-102

Q12. Q13. 2SC930D

Bottom view
E C B

2SA702 2SC930
2SC1740 2SC668
2SD438 2SC536
2SB560 2SC1317
2SC1318

TOP VIEW
BACK
FRONT

| SWITCH | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | SPA | SPB | AUX | TAPE | PHONO | LW | MW | SW | FM | AFC | MONO/ST MUTE | LOUDNESS |
| | ON | OFF | | | | | | | ON | ON | ST/ON | OFF |

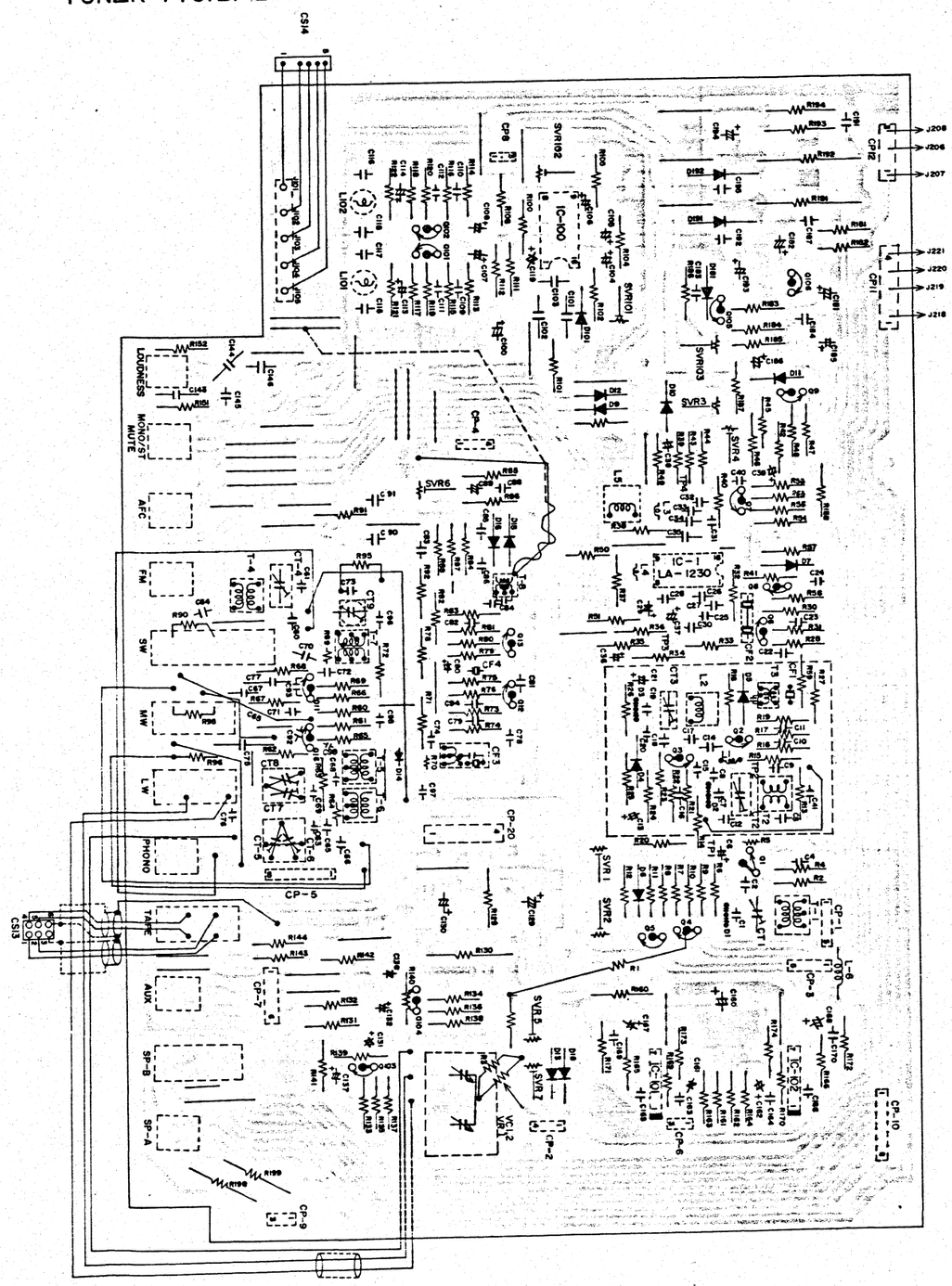
| | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
|---|---|---|---|---|---|---|---|
| IC-291 | 1.8 | 0.5 | .006 | .000 | 0.53 | 7.7 | 25.8 |
| IC-101 | 1.93 | 0.56 | .007 | .000 | 0.57 | 6.9 | 27.0 |

| | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| IC-1001 1002 | 0.0 | 3.10 | 3.45 | 3.45 | 3.45 | 3.11 | 3.12 | 11.3 | 10.37 | 10.55 | 4.76 | 8.93 | 4.76 | 8.93 | 4.74 | 8.93 |
| IC-1 | 2.81 | 2.81 | 2.81 | 0.00 | 0.00 | 5.76 | 5.65 | 5.75 | 5.75 | 5.75 | 12.28 | 5.00 | 0.00 | 0.00 | 5.13 | 0.00 |
| IC-100 | 10.48 | 2.94 | 5.43 | 7.44 | 7.51 | 13.90 | 0.00 | .326 | 6.36 | 2.11 | 2.11 | 2.41 | 2.11 | 2.11 | 2.11 | 2.81 |

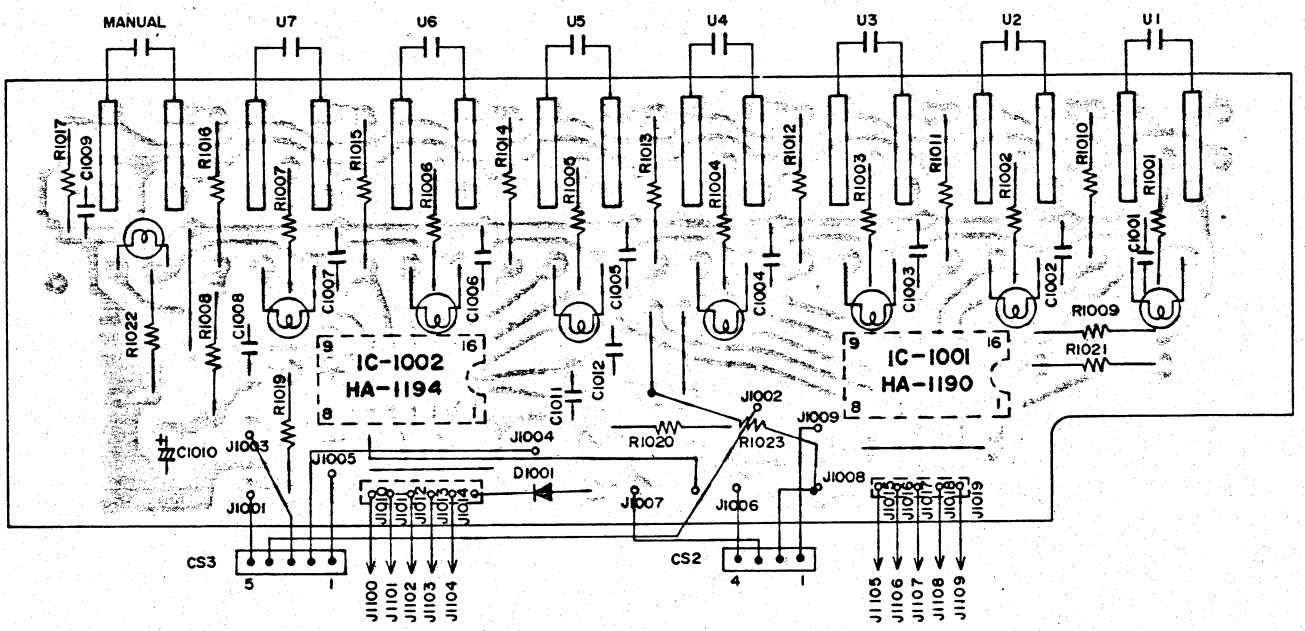
NOTES
1 ALL RESISTANCES ARE 1/4W UNLESS NOTED OTHERWISE VALUES ARE IN OHMS (K=10³, M=10⁶)
2 ALL CAPACITOR VALUES ARE IN μF (p=10⁻⁶μF)
3 VOLTAGE READINGS TO COMMON GROUND ARE MEASURED WITH V.T.V.M UNDER NO SIGNAL
4 THIS SCHEMATIC DIAGRAM MIGHT BE MODIFIED WITH DEVELOPMENT OF TECHNOLOGY

# WIRING DIAGRAM

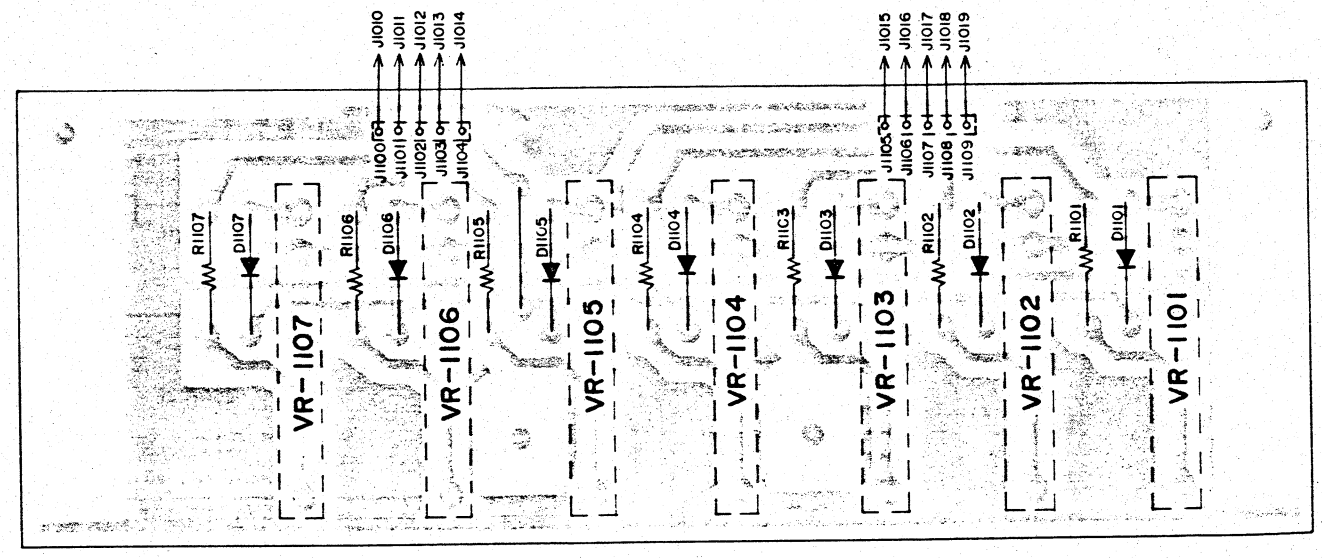
## TUNER P.C.B. Bottom



## TOUCH P.C.B. Bottom




## PRESET P.C.B. Bottom

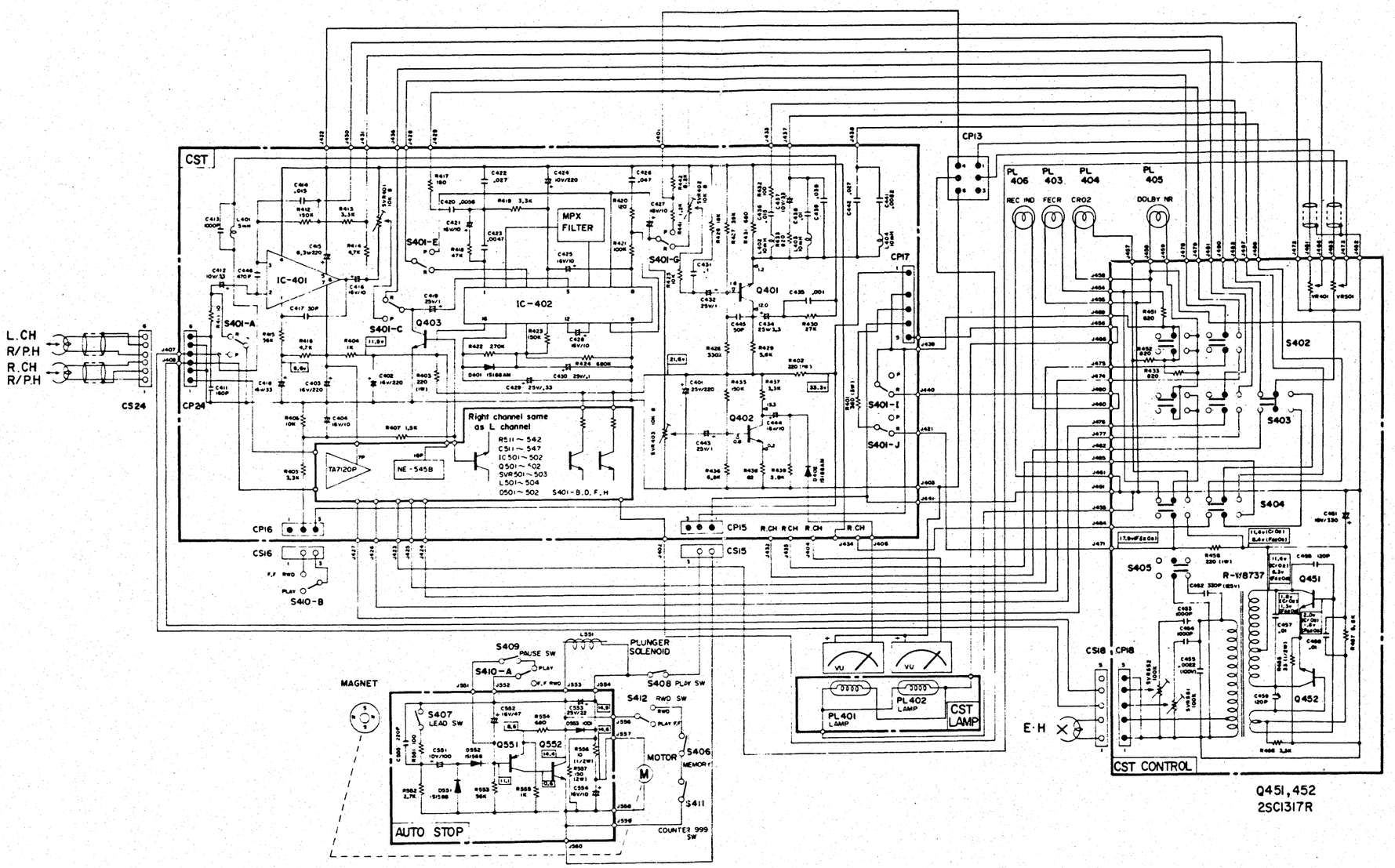


IC-401
TA7120P

Q403
2SC536E

IC-402
NE-545B

Q401, 402
2SC536E




Q451, 452
2SC1317R

Q551
2SA702F

Q552
2SC1317R

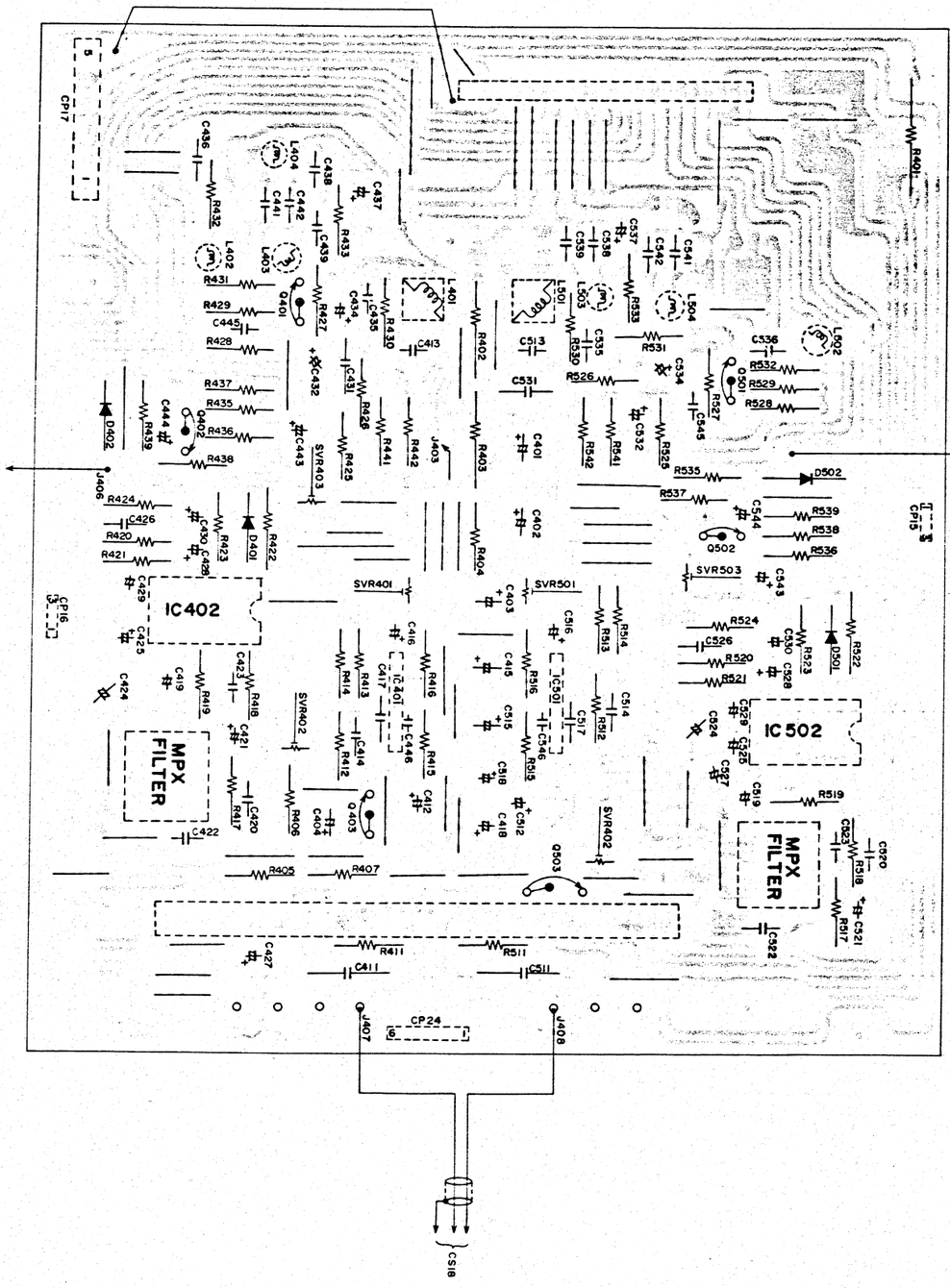
S401a-d REC/PLAY (REC)
S402a-b DOLBY NR/ON OFF (OFF)
S403a-f EQ (Fe)
S404a-b BIAS LOW/HIGH (LOW)
S405 BEAT CUT
S406 MEMORY ON/OFF (ON)
S407 LEAD SW
S408 PLAY (ON)
S409 PAUSE (ON)
S410a-b PLAY/FF RWD (PLAY)
S411 COUNTER (999)
S412 RWD SW (ON)

| IC \ PIN NO. | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| TA7120P | 2.0 | 0.6 | 11.4 | 0 | 0.6 | 6. | 9. | | | | | | | | | |
| NE5458 | 3.7 | 4.1 | 4. | 6.3 | 5.4 | 6.4 | 6. | 6.9 | 0 | 7.0 | 7.5 | 0.7 | 0.7 | 0.5 | 0.5 | 11.9 |

NOTES
1 ALL RESISTANCES ARE 1/4W UNLESS NOTED OTHERWISE VALUES ARE IN OHMS (K=$10^3$, M=$10^6$)
2 ALL CAPACITOR VALUES ARE IN μF (p=$10^{-6}$μF)
3 VOLTAGE READINGS TO COMMON GROUND ARE MEASURED WITH V T V M UNDER NO SIGNAL
4 THIS SCHEMATIC DIAGRAM MIGHT BE MODIFIED WITH DEVELOPMENT OF TECHNOLOGY

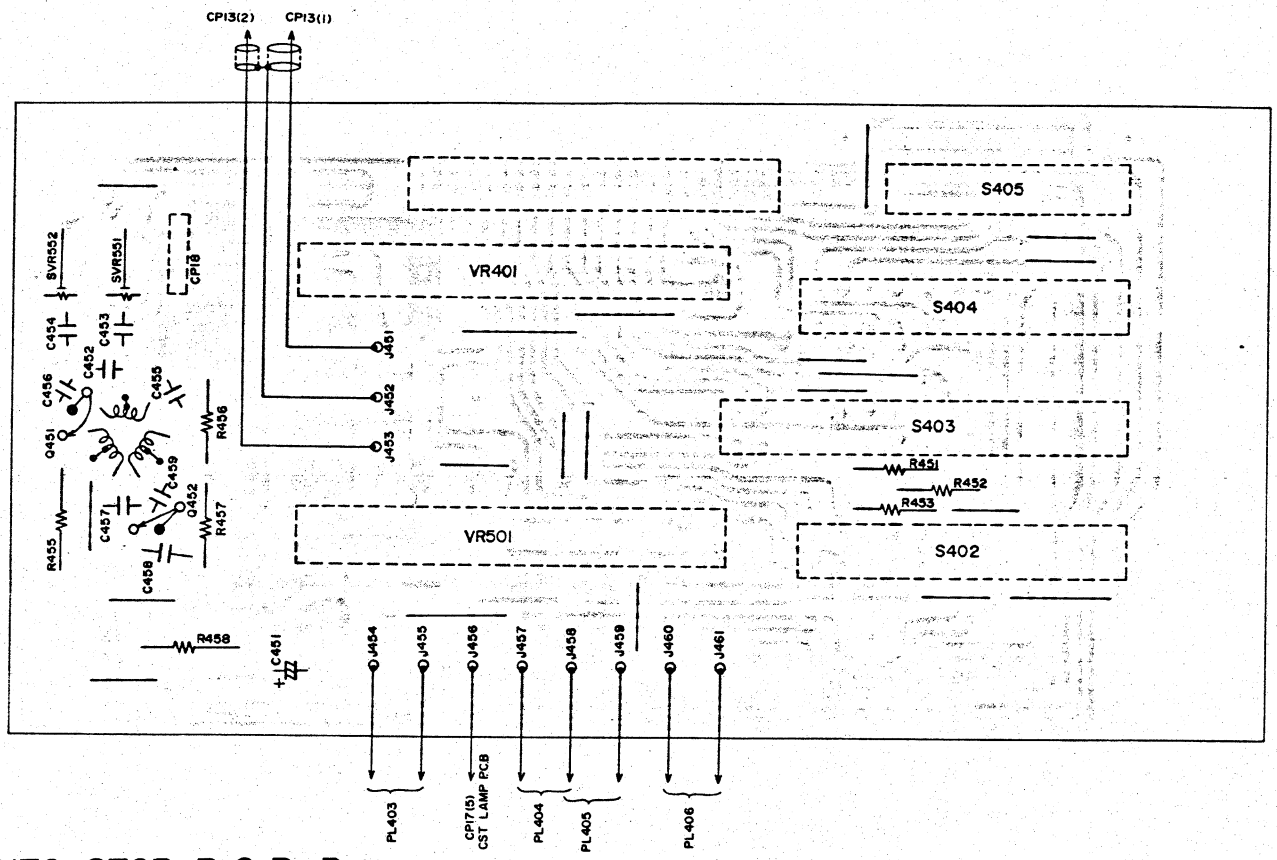
# WIRING DIAGRAM

## CASSETTE AMP. P.C.B. Bottom

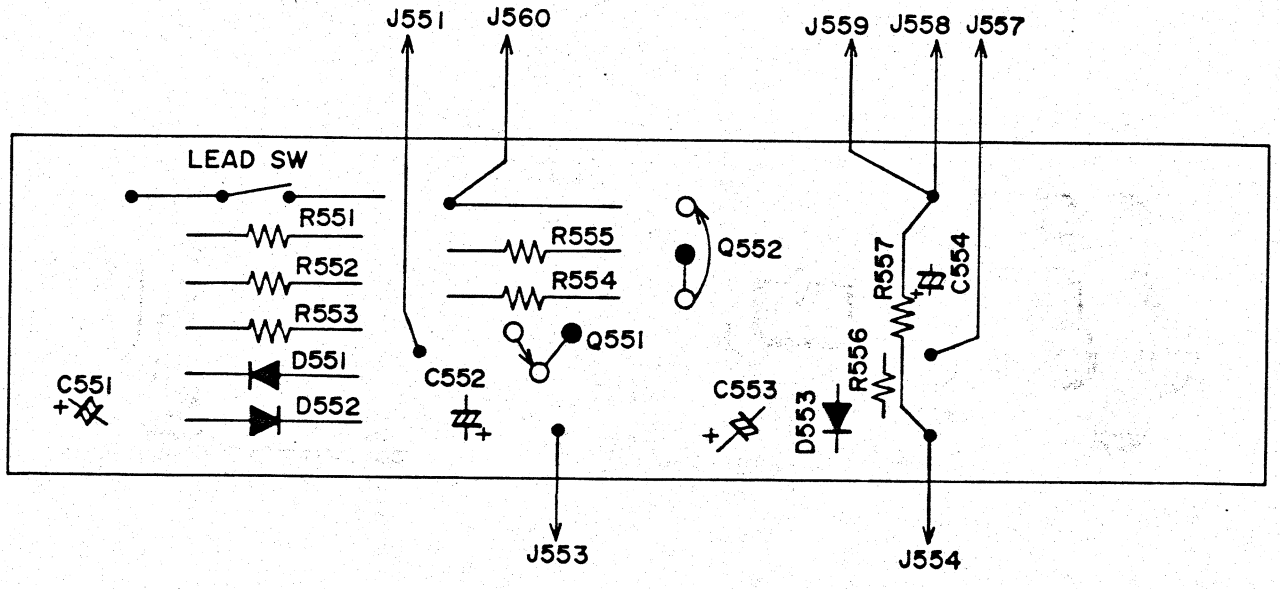


# WIRING DIAGRAM

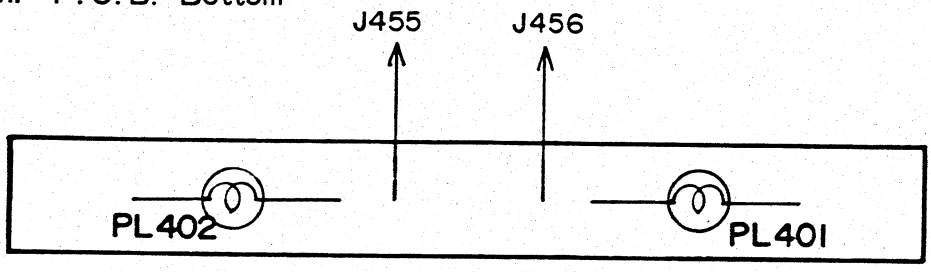
## CASSETTE SWITCH P.C.B. Bottom



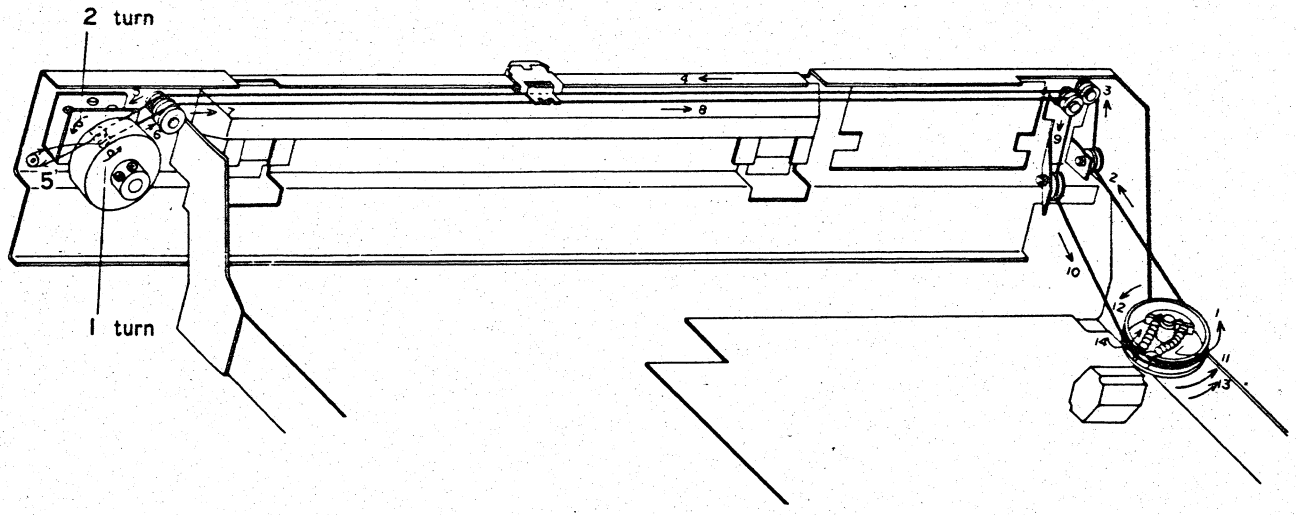

## AUTO STOP P.C.B. Bottom




## CASSETTE LAMP P.C.B. Bottom

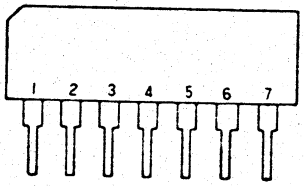


## DIAL CORD STRINGING

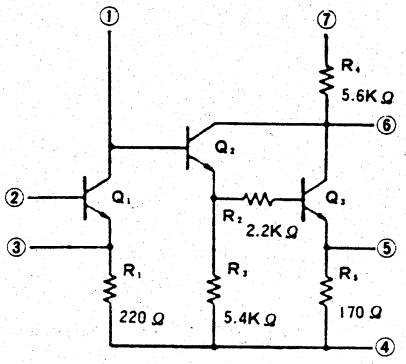



## IC PACKAGE and EQUIVALENT CIRCUIT

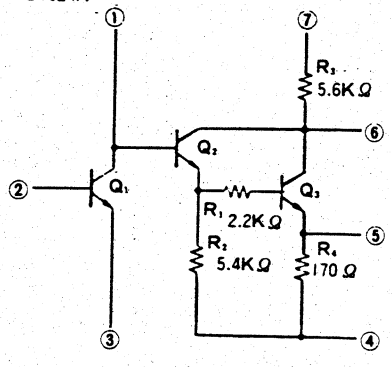
TA7120
μPC1023H
μPC1024H



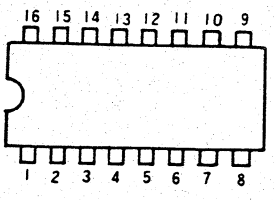

μPC1023H




μPC1024H

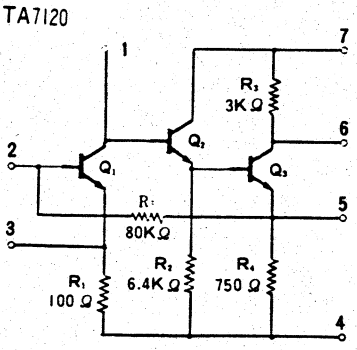



LA1230
LA3350
HA1190
HA1194
NE545B

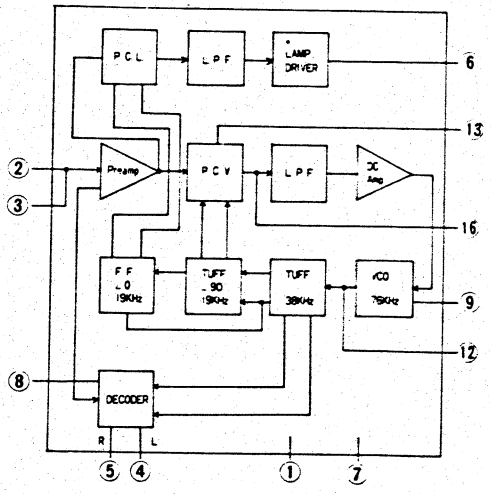



(TOP VIEW)

TA7120




LA3350




NE545B